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—*Spring Hours.*—

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Vol. 28, No. 2 A THRILLING PUBLICATION

December, 1952

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THE LONG VIEW Fletcher Pratt

There was nothing to hold them together except knowing they might be the very last people on Uller — or, perhaps, the first!

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N. L. PINES, Publisher

FANNY ELLSWORTH, Managing Editor

Cover Painting by

EDWARD R. ROFHEART, Art Director

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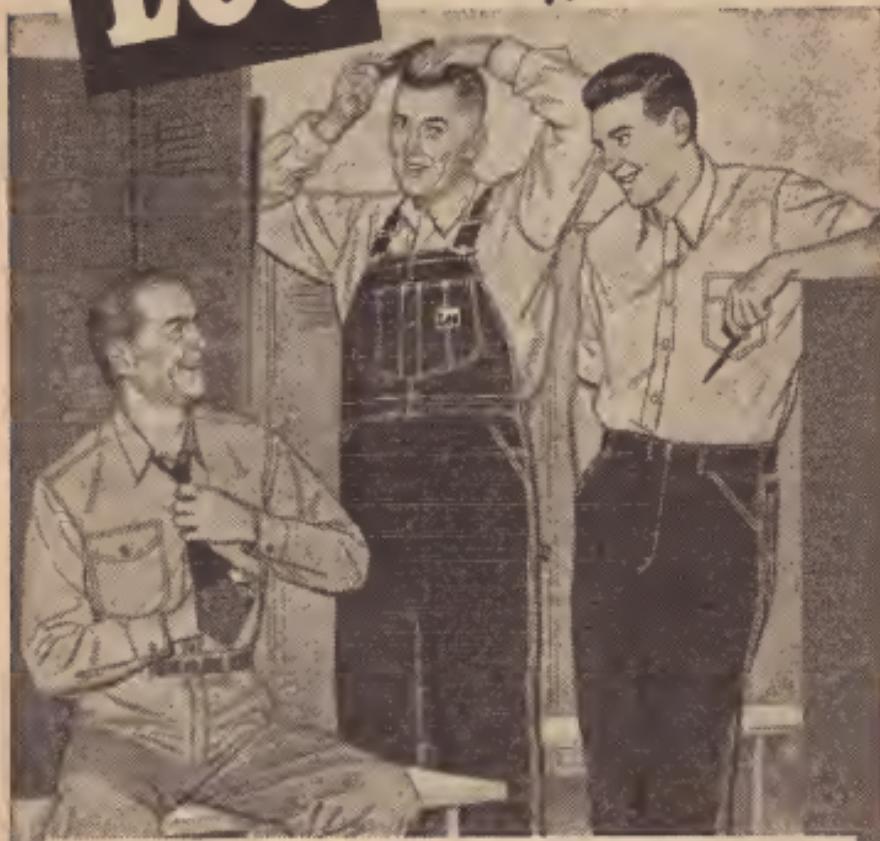
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STARTLING STORIES Published every month by Better Publications, Inc., N. L. Pines, President, at 1133 K. Valle Ave., Kokomo, Ind., Editorial and executive offices, 16 East 46th St., New York 16, N. Y. Entered as second-class matter at the post office at Kokomo, Ind., under the act of March 3, 1893. Copyright, 1952, by Better Publications, Inc. Subscription \$12 (12 issues), \$3.00, single copies, 25¢. Foreign and Canadian postage extra. In correspondence with this magazine please indicate postal zone number, if any. Manuscripts will not be returned unless accompanied by a stamped, addressed envelope and are submitted at the author's risk. Names of all characters used in stories and science-fiction articles are fictitious. If the name of any living person or actual institution is used, it is a coincidence. December, 1952, issue.

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A Science Fiction Department Featuring Letters from Readers

WE ARE but lately returned from the hamlet of Brooklyn, to which we were beguiled by invitation to observe the unveiling of a baby electric brain about to be mass-produced for business. If you are one who reads science fiction with your tongue occasionally in your cheek, we heartily wish you had been there. For what we saw was so much like what you have read in stories labeled fiction that it became necessary to pinch oneself and mutter that this was real, real, real, not a story.

Elecom 100 is the name of the little monster we saw in action. It is the baby brother of such giant computers as EDVAC, built for the Army, and ENIAC, built for Bell Telephone. It was designed by Dr. Samuel Lubkin, a cherubic, modest sort of genius who had a large hand in building its big brothers and who showed off his baby to the press with a refreshing candor about its growing pains.

Digital Computer

Technically speaking, Elecom 100 is a digital computer. It is not a "brain" in the sense that it is capable of real thinking, but computation is a kind of thought at that and the end results are sometimes startlingly similar.

When we arrived the demonstration was well under way. Correspondents, male and female, were perched on folding chairs, paying heed to Dr. Lubkin who was explaining, with disarming informality, as much as he could make intelligible in lay terms. A typewriter seemed to be busily clattering somewhere. We gathered that Elecom 100 had just demonstrated its superiority over logarithms by solving ten lines from a seven-place table faster and more accurately than a humanoid-operated slide rule, had computed a weekly payroll in a flash and figured up a correspondent's income tax for him in exactly 15 seconds. For this alone it could have a promising future.

The machine took the form of an upright

U-shaped panel, covered with vacuum tubes. In front of this was a common steel office desk with a typewriter in a center well. The sound seemed to come from here. There was an operator sitting at the typewriter but he didn't seem to be doing anything. Yet the typewriter was obviously chattering at a great rate.

We got a word in during a lull. "Who's typing?" we asked Dr. Lubkin.

"The machine," he replied, as though it were the most ordinary answer in the world.

Stranger Than Fiction

For ourselves, gooseflesh appeared on all areas of our epidermis and the small hairs on the back of our neck stood up. Sure—we've read it a hundred times, we've bought dozens of stories in which it goes on. But this wasn't a story—we were watching this. If you don't think it's different we just hope you get a chance to see it.

"We have taught the machine the rules of a game called NIM," Dr. Lubkin now announced. "Would anyone like to play?"

A rash reporter would. NIM is a game of combinations, somewhat like a more complicated tic-tac-toe. It is played with marbles, divided into groups, each player being free to take as many marbles as he likes from one group, in each move. The trick is to take the final marble and to do this you have to leave the correct number of marbles always behind you.

Seven groups of marbles were used. The human was given his choice of making the first move or letting the machine move first. The reporter who wanted to play elected to go first and took some marbles from the first group. This information was then typed into the machine, after which the operator sat back. Lights flashed all over the board, the panel hummed busily. Then the typewriter chattered into action, and again I felt that atavistic, primordial lifting of the hackles as the machine, in obvious

(Continued on page 126)

WHAT SECRET POWER DID THIS MAN POSSESS?



Benjamin Franklin
(A Rosicrucian)

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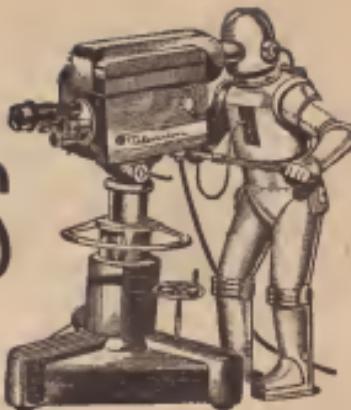
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GIVE ME THE THIRD
DEGREE, I'M GOIN'
WITH YOU

WITH THE HELP OF A 'BRIED' PIER GUARD,
THE RIVER PIRATES PREPARE TO MAKE OFF
WITH A PRIZE HAUL...



VIDEO-TECHNICS

by PAT JONES



UNHERALDED and unpublicized, an event occurred on tv last summer that made history in the medium. Listed only on programs as "The Proceedings of the American Medical Association," it did not capture the imagination or attention of a very large audience. Sounded too dry, and not at all entertaining. Yet for the first time in tv history the general public was admitted to an operating amphitheatre during the course of an actual operation.

For eight minutes the tv audience watched Dr. Fogelson as he operated on a patient suffering from a duodenal ulcer, while the surgeon, former Chief of Staff of Wesley Memorial Hospital, and associate professor of the Medical School of Northwestern University, explained in simple terms, for the benefit of his layman audience, precisely what he was doing.

Similar presentations have for several years been telecast over closed circuits for the benefit of the medical profession alone; this marked the first time, however, that the interested layman could be an armchair observer of the skill and competence displayed by one of the nation's foremost surgeons.

Almost to the last minute some diehards argued that the general public was neither "nature" nor "objective" enough to take such advanced tv fare in its stride. It was the more liberal view that the American public should become increasingly aware of the tremendous progress that has been made by American science in the past fifty years.

At the turn of the century it would have been considered foolhardy even to attempt to perform an operation for a duodenal ulcer. And to think of a camera's eye catching the event and relaying it to an audience of laymen across the country would have been sheer madness—except, perhaps, to an advanced student of science fiction

who knows quite well that today's fiction is tomorrow's fact.

Ad Schneider, Special Events Producer at NBC, tells us that to the participating medical men it was all "part of the routine." Complimented on his performance, the surgeon smiled indulgently at the television technicians. "Why boys," he said, "I just did what you fellows told me."

The operation lasted for nearly four hours, and the eight minutes which was televised were fitted into a full hospital schedule. No allowances were made for the televising, other than admitting the technicians and their equipment to the operating room.

There were several unique features on the program, not the least of which was the way in which it was introduced. Across the tv screen undulated a pip of light, accompanied by a regular *ta-thump, ta-thump, ta-thump*. It was a pictorial representation of a normal heartbeat, accompanied by the sound of the heart valves as they functioned.

This was done by adapting to the tv screen a tape recorder which reproduced the sound of a normally beating heart, and an electron cardio-scope for visualizing the cardiac sounds as they are heard. At present this device is used to record cardiac auscultation for teaching purposes. By listening to tape recordings, medical students can learn to recognize immediately every type of faulty heartbeat. A heartbeat recorded on tape may in the future provide a permanent record in a doctor's files, independent of his memory and written notes.

We hope you'll be watching the next time scientific history is being made on your tv screen. You'll be interested to know that AMA has two such meetings yearly. Look for the next one. If it's on tv, you're in for a fascinating experience.

the LONG view

a novel by FLETCHER PRATT





*There was nothing to hold them together
but knowing they might be the
last people on Uller—or the first. . . .*

I

THE waiter set down Greta Manning's dessert. "It's something they bring from Freya," said her father. "Called 'Dream Potion' I believe. Whatever we think of the intelligence of those psychs, I'm obliged to admit that they have elevated cookery to the status of a fine art. Good?"

"Mmmmm," said Greta, allowing the pink concoction to caress her palate as she used her tongue to maneuver into a corner behind her teeth the capsule she knew she would find in it. "Too bad you don't eat sweets."

"I do not consider it a loss," said Theodore Manning, serenely. He turned to the bald-headed man. "The electronic calculator shows that with my bodily chemistry, there is a high probability that I might lose as much as four years off my life."

The bald-headed man nodded. "Gambling is unscientific," he said, with the air of a man repeating a formula.

Greta put one hand on the table. "I think I'll go and make myself beautiful," she said, "if you don't mind waiting for a minute before we go in for the show."

Theodore Manning nodded; the bald-headed man stood up courteously. As the girl vanished through the hangings in a swirl of soft lights he sat down again and said: "Your daughter making herself beautiful impresses me as almost as unnecessary a task as proving Einstein's field theory."

Manning nodded. "Both sides of the family brought physically eugenic lines," he said. "It's the temperamental number that's dangerously high. She's a 39, even though she is a DD. As a matter of fact, that's one of the things I wanted to talk to you about before the Association went into open session. I think it's always advisable to get as many of these details settled in advance as possible, and there are certain points in the program we have worked out in the Terran Council that we would be unwilling to—expose for public discussion."

The bald-headed man said: "You can always count on the support of the Odin delegation for any truly scientific plan."

"The immediate relation of this plan to scientific advancement may not be obvious—" began Manning, and then stopped as Greta came in again, the rainbows of her party dress dancing around her. (She had read the message in the capsule and rid herself of both via the disposal chute.)

"Most perfect of fathers," she said, "your imponderable fraction of a daughter remembers that she has forgotten to tell you about something. I have a date.

For after the show this evening."

"Night-spotting," said Manning. "Who is it this time?"

"Edgar Braun," she said, looking at the tablecloth. "He's found a new one. It's only twenty minutes' flight, and he says the dancers do rituals from 'way back in the twentieth century. They come from some place called Bali, where the Japanese were an imperial people. Imagine!"

Manning had a slight frown. "Isn't this the third or fourth time you've been going somewhere with this young man?" he said. "Emotional involvements are unscientific."

"Oh, pooh!" She reached over gallantly and patted his cheek. "I'm as emotionally involved with him as I am with the Secretary. He just knows a lot of queer places, and we have a good time. It isn't anything like an acquaintance."

The bald-headed man, who had been glancing from one to the other, said: "Edgar Braun. That's a rather common name on Odin, where I come from. Is he from there, by any chance?"

GRETA flashed him a glance. "I think he was originally. But he came here to take his Ph.D. in vulcanology at Hawaii, because you have so few volcanoes on Odin."

The bald-headed man toyed with his spoon, and dropped it as the waiter began to collect the debris of the dinner. "Most of the Brauns tend to be moderates. There's a psych streak somewhere in the line, I've been told."

Greta laughed. "You needn't worry about Edgar. If there was a psych streak in his line, he must have come to Terra to get rid of environmental influences that could develop it. He's a perfectly good DD. I've seen his card; after all, my parent taught me that." She glanced demurely at Manning. "In fact his full number is DD-24-19. Well, in the first place, anyone with a 19 temperamental rating couldn't possibly be a psych personality, no matter how deeply the tendency might be embedded in

his genes. And—"she flashed a glance at her father"—do you really think I could be interested emotionally in a 24? Ten points below me in intelligence? He'd try to repeat jokes on me to make sure I understood. In fact, he does."

Theodore Manning emitted a sigh and reached under the edge of the table to insert his thumb in the register which would automatically charge the president of the Association for the Advancement of Science with the price of the dinners. "No, I suppose not," he said. "Even the psychs tell us that women

apologize to them, then saw the bald-headed man watching her with frowning concentration, and sailed past to the place in the middle, thrusting her thumb into the socket.

The "Stellania" reached its last wonderful chords. There was a breathless pause, the screen disappeared, and they were looking into the depths of a stage that seemed to run back into infinity. A blue light lay at one corner, a yellow one at the other. No matter how often Greta had seen it, there was always a thrill in the opening of the eternal contest, and

A Strange New World

TAKE a silicone world with silicone life . . . silicone life? Why not? Life doesn't necessarily have to have our own carbon-oxygen metabolism—there are many chemical combinations possible. But given a silicone world with silicone animals and plants, Fletcher Pratt has constructed a tale in which the science is authentic and consistent and never out of character with the story. If you want an inside look at how this was done, read the author's own notes on the planet Ulter which you will find elsewhere in this issue.

THE LONG VIEW, along with two companion pieces on the silicone planet, is already scheduled for book publication later in the year. Aside from its interest as a scientific exercise it also happens to be a gripping and sophisticated story which we found quite enthralling. We don't have to invite you to let us know how you like it. You will.

—The Editor

have a greater capacity for impersonal associative pleasure than men. What is the ancient word?—"gold-excavating"—or something like that. I think I hear the 'Stellania': shall we go in?"

The bald-headed man stood aside for Greta to take the second place, as Manning, with the assurance of a man who is bored by merely petty courtesies, and whose position has entitled him to too many of them, led the way from the dining-stall down the corridor, the yellow lightnings of his physicist's evening dress flashing around him.

The amusement room was already full, but as Manning strode down the aisle, a couple of techs next to a vacant seat scrambled out apologetically to take places farther back. Greta started to

she gripped the base of the finger-controls more firmly as out of the blue depth swam a planet, attended by twin moons. Another swam into view on the yellow side; from the lightings on them, it was evident that they were satellites of different stars. A tiny dot that would be a space-ship arced from the blue planet to one of its moons. The music took a rapid beat to indicate times and distances.

Greta, watching in frowning concentration as she made her calculations, felt the bald-headed man relax beside her with a little chuckle. He said: "I'm glad I'm here as a visitor and don't feel obligated to play. Counting the primary of that blue planet, that makes it a problem of four bodies. They don't make it

that complicated for us on Odin."

She flashed him a glance. "There are a lot of techs and low-number scientists in for the Association meeting. Ssssh, I want to think."

ON THE yellow planet there was a pinpoint of light, the indication to those familiar with the game that it possessed atomic explosives, and another space-ship dot soared away from it hunted vaguely through the space between and then returned to the surface. The bald-headed man said: "They're giving you plenty to work with; space travel on both of them."

From one of the moons of the blue planet, a spaceship dot rose jerkily. "Damn!" said Greta, her fingers flying. "I was afraid someone would start too soon. There hasn't been time to establish the rotational relations. There!"

The space-ship swept around in a graceful curve to the blue planet's other moon, and the girl watched intently as the bald-headed man said: "Don't you often find yourself overruled by a majority? I find it frustrating."

"Not very often," said Greta, eyes still on the stage. "This machine is set to accept the nearest accurate calculation, and the majority only controls when it's a question of calculations of the same order of accuracy. I'm pretty good at math, so I get away with quite a lot . . ."

She broke off suddenly as two spaceships left the yellow planet in a long curve. Then: "Somebody playing on the yellow side is good; look at that, they're orbiting around each other and getting maximum mutual course correction."

She pressed keys; the music gave a skirl, and two, three, four space ships left the blue planet for its outer moon, curving in sharply. "Good girl, if you did it," chuckled the bald-headed man. "That will give greater distance capacity and better angle of approach."

Greta didn't answer; her lips a little parted, she had become utterly absorbed in the great game, as miniature space-

ship after space-ship left the two planets and maneuvered toward each other in a maze more intricate than three-dimensional chess. Someone who had chosen to play on the blue side made a mistake, two of the space-ships collided and dropped back toward the planet as she said, "Damn!" again, and "We haven't an unlimited number of those." But then someone on the other side blundered, too, and one of its ships shot off at a long tangent to the very limit of the theatre, from which there came a flash to announce it was lost.

In the central space the opposing fleets were marshalling, the yellows moving the more rapidly, but also more raggedly, not seeming to have quite the precision Greta's accurate calculations were giving their opponents. They approached each other; there were little flashes here and there, and the miniature space-ships began to disappear as hits were scored. The losses were not all on one side, but the blues, with their compact formation and better maneuvering, were clearly gaining, gaining. Suddenly, the yellow fleet split apart, was decimated, in full retreat. A murmur rose from the audience as the pursuing blues swept them away—all but one, which almost unnoticed, slipped past the outskirts of the blue fleet toward its home planet.

It closed in suddenly, there was the flicker of light that meant a super-nuclear bomb, the whole planet began to burn, and abruptly the curtain was closed and the lights in the amusement room came on.

Greta, her face downcast, turned toward her father. He was sitting with his hands still on the controls, a smile that might be triumph on his countenance.

"Oh!" said the girl, "You did that! It wasn't fair!"

"The phrase is unscientific and tinged with emotionalism," said Theodore Manning. "'Fair' is a term from the old civil courts, I believe, relating to the period before it became possible to

achieve scientifically accurate results from a given combination of factors."

II

THEODORE MANNING snapped the key on the phone to the "Out; Make Record" position, adjusted the panel beside his chair to show the face of anyone at the door without showing his own and sat down.

"Do you care for tobacco?" he said; "Or a spray of some kind in the room?"

"No thanks," said the bald-headed man. "Without neglecting the amenities, we're a little more austere on Odin than the home planet, and I never acquired either habit."

"Pity," said Manning, taking out a cigar and lighting it. "You miss a good deal." He drew in a couple of reflective puffs, and then; "As a matter of fact, I'm rather glad my daughter isn't here."

A small smile was visible at the corner of the bald-headed man's mouth. "I have been wondering when the exalted President of the Association for the Advancement of Science would get around to explaining why he invited a minor delegate from Odin to dinner."

"Sarcasm does not become you," said Manning. "Nor does false modesty. As a matter of fact, here on Terra we call the Odin scientists who are disposed to cooperate with our more advanced elements the Lauria group, and leave it at that."

"I see," said Lauria, and waited.

"I suppose you have considered means of dealing with the psychs yourself."

The bald-headed man's impassiveness suddenly deserted him. "We've considered it to the point of over-production of adrenalin!" he cried. "But what can we do? We not only have them to fight, but the damned moderates! We tried to get the marriage rejection regulation repealed on Odin, just for that one planet, and do you think we could do it? I'll be damned if we could! Moderates!" He spat the word. "And they call themselves scientists!"

"I am glad you feel so strongly about it," said Manning. "The more advanced scientists here on Terra have long since reached the conclusion that the only way to break up this connection between the moderates and those confounded witch-doctors, the psychs, is to eliminate the latter from the Association entirely."

"Wouldn't the psychs appeal to the political authorities?"

Manning smiled. "That might have some weight on a few of the outer planets, where the environment is still incompletely subdued; Magni, for example, or even to a lesser degree, your own. I can assure you that on Terra or Venus or Thor, the political authorities are only a kind of game for people of low I. Q.'s—techs, or artists or servs. We merely go before them and present a scientifically established fact, and they make the necessary changes in the regulations."

"All right, then." Lauria patted himself on the top of his naked skull. "The political authorities won't interfere if you succeed in eliminating the psychs from the Association as unscientific. But how do you propose to accomplish that? They have votes in the Association, and so do the damned moderates."

"Did it ever occur to you how the votes of the psychs are cast in the parent Association?"

"No. What difference does it make?"

"It makes a good deal, as it happens. The psychs are inordinately proud of always being a unit on every question. They consider this agreement one of the proofs of the 'fact', as they call it, that psychology is really a science."

"Yes, I have heard something about that," said Lauria. "In fact, they took away the license to practice of one on Odin because he couldn't agree with the others on a diagnosis."

MANNING said: "You wander into reminiscence, which is unscientific. Therefore, when any question comes up for decision, the vote of the psychs is cast as a unit—and it is cast by the No.

I psych, the one with the highest intelligence rating."

"Who is at present old Henrik Kool," said Lauria. "As stubborn a man as I know about. Do you suggest that the next man in line might be more amenable and that Kool is not immortal?"

"I suggest nothing of the kind. The resort to violence is barbarous, and all our advanced group would be the first to condemn it. Moreover, the next man in line is Walter Trevenna, I believe, and we should gain nothing by substituting him for Kool. No. We have developed a far better and more subtle plan."

"Go ahead."

"What would you say if I told you that I know of a psych with an 11 intelligence rating?"

Lauria's eyes opened wide. "I would first say that you were perpetrating a joke and then, if convinced you are serious, that I'm surprised he hasn't already been made No. 1 psych. Why, you're only a 16 yourself!"

Manning smiled again. "It's no joke, and it's perfectly extraordinary that a man with one of the lowest intelligence figures ever reached should be a psych. Or perhaps, I shouldn't call him a man yet. He's not even thirty years old, and hasn't been declared adult. The name is Lajos Harkavy—I believe Hungarian by ancestry—and his full rating is BC-11-71. Quite aside from the fact that his temperamental figure is so high that he couldn't be anything but a psych, he's interested in painting." He gave a note of utter contempt to the last word, and stopped, but as Lauria continued to look at him without saying anything, went on:

"Well, our proposal is simply to have him declared adult."

Now Lauria frowned. "I don't see . . ." he began, and then; "Let me ask two questions: how would having a man with that degree of intelligence at the head of the psych interest help our position? And how do you expect the Association to declare so young a man

adult? Is that why you want my help?"

Manning said; "That's three questions and not two, as a matter of scientific accuracy. I'll take up the first one first. Lajos Harkavy has received general scientific and special psychological training, but as I was just remarking, he seems to have a temperamental feeling for the arts. That is, if he were head of the psychs, one of two things could be expected. Either any unified action on their part would be paralyzed by internal conflicts among them, or he would remain perfectly indifferent to what happened to the general body. As a matter of fact, I believe it would not be too difficult to get him to go to Freya, where the atmosphere would take care of it that he enjoyed himself harmlessly without ever bothering us again. And as he has a good 120 years expectation of life yet, that would guarantee us a free hand for this length of time. I think it is not beyond possibility that we could get the regulations altered in a satisfactory manner; even eject the psychs altogether from the Association."

L AURIA nodded. "Your line of reasoning is convincing," he said "And I withdraw my third question. I'll be glad to help in any way I can. But the other one is still more serious; how do you propose to have him declared adult?"

"There is one case in which any member of the Association can be declared adult and admitted to full participation, provided he has a low-number intelligence rating. That is—when he marries."

"I see. So you propose to set up an acquaintance looking toward marriage for this Harkavy. Did you have anyone special in mind?"

Manning laid down his cigar. "I have. My daughter, Greta Manning."

Lauria made a sound which could not be interpreted in words.

"Divorce your mind from emotionalism," said Manning, "and consider the

matter rationally. In the first place, the psychs will hardly object to the idea of their future leader marrying my daughter. The objections, if any, would come from our advanced group, and it is precisely for this reason that I asked you to drop in tonight—to tell you that the idea has my entire approval. In the second place, their intelligence numbers are within three points of each other, which makes it a eugenically desirable permanent union."

"But—" began Lauria.

Manning raised a hand. "In science, we must learn to reject merely emotional appeals; that is the thing that distinguishes us from the psychs. I am quite aware that she is my daughter, and I have the normal paternal feelings toward her. However, as we were remarking earlier, her temperamental number is dangerously low, and I have reason to believe that she has been contacting some of the moderates, perhaps is involved with them. We managed to get a spy ray on Toijiru Shigemitsu, and it reported she had met him at least once."

"You overwhelm any objections I can make before I think of them," said Lauria, "but I still have one more. How do you know the acquaintance will result in a marriage? That is, may not this Harkavy already have an emotional involvement?"

"It doesn't matter. People with anywhere near as low an intelligence number as his are excessively rare, and if either she or Harkavy should reject the acquaintance, they might be forced to take it up again at the age of compulsory marriage. As for any emotional involvement Harkavy has at present, it may be dismissed; his intelligence rating is so high that he could not conceivably be allowed to marry any such person. For that matter, I don't think he has much opportunity where he is; he's out on Uller."

"That's one of the aberrant planets, isn't it? Silicone chemistry as I remember, and just barely habitable."

"That's right. Why anyone should want to go there, I can't imagine, but he seems to consider it a good place to practice his art."

Lauria said: "Very well, you can count on my support when the matter of the acquaintance comes up before the Eugenic Committee. I presume you yourself will have to offer objections simply for the sake of appearances?"

III

ALL ready for a big evening?" said Edgar Braun lightly, as the servant closed the door of the flyer behind them.

"Mmm-hm," said Greta. "I'm glad you picked an evening suit with brown radiations; it will go nicely with my rainbows."

"I keep telling you we're temperamentally made for each other," he said, throwing in the switch. "If you'll only let me apply for an acquaintance—"

The little machine soared, ducked lightly to the left in response to the warning signal indicating an incoming rocket express, and steadied toward the north.

"Have you ever thought of the potentialities of model numbers?" asked Greta.

"Oh, listen, Grea—"

"You listen. I've told you a dozen times that I refuse even to think about marriage or getting emotionally involved until this thing is decided, one way or another. Besides, if we lose, there won't be any chance for emotion. The advanced group is getting awfully close to putting through that regulation about not being able to refuse any marriage recommended by the Eugenic Committee. Father's stopped talking about it, and that means he's about ready to act. Where's the meeting going to be held tonight?"

"At a casino on the shore of Lake George. Paul found a spy ray planted in the Rodman place. As a matter of fact . . ." His voice trailed off.

"As a matter of fact, what?"

"Nothing. You'll find out when you see Toijiru."

It was dark inside the flyer as the silver ribbon of the Hudson grew small beneath the moon and a Montreal-New York carrier flashed above them in the opposite direction, its port-lights gleaming like a string of fireflies. Edgar Braun swung the flyer expertly into the long slant. "Take a look back, will you?" he said. "Just to check on whether we have a tail."

Greta swung the basket-seat around and craned her neck. "Not unless he's beneath us," she said. "Who else is coming tonight?"

"Just Toijiru and Paul Frasser. It's a special; something came up. All right, close down, I'm going in."

The flyer slid down the slope, bounced once on the surface of the lake in a cloud of spray, and rounded to the pier, where a serv hooked it in and swung back the door. As they climbed out the lights from the casino windows caught Greta's dress and once more turned it to a garment of rainbows, while the soft beat of music came from within.

"This is a queer place to hold a meeting," said Greta. "Are you sure that the spray and the drinks won't affect our thinking?"

Toijiru thought of that. There are some little summerhouses on the hill at the back, and after you and I have had a dance or two, we're to go out there and meet them. I have the directions."

The outer door slid back as he placed his hands in the black-light ray, and they were in the corridor, being greeted by a bowing superior serv, who bowed still more deeply at the full unit Braun slid into his hand, and led the way to the inner door.

A FINE wave of spray met them with a pulse-tingling effect at the door; a dance had just ended, and exotically-clad couples were laughing and talking as they made their way back to the tables. As the serv led them to one,

Braun said; "I don't suppose you have any idea of what your father is planning for the Association meeting?"

"Sash," said Greta, "you never can tell who might overhear." Then as they sat down; "Not precisely, only it's going to be something pretty tricky. He had dinner with the head delegate from Odin tonight, and yesterday it was one from Venus, and they both belong to the advanced group already."

"I don't see how—" said Braun, and paused to give an order to the waiter, then completed his remark. "—how that makes any difference."

"Don't you? They'd vote for anything he proposed. He must be getting them ready to vote for something he doesn't propose."

"I wouldn't have thought of that."

"I know, Ed. That's one of the reasons I won't accept an acquaintance with you."

The orchestra swung into a smooth rhythm that had its origin on one of the outer planets, and Edgar Braun, his face a little stricken, stood up and offered her his hand. The spray, as usual, was intensifying his emotions. As she pillow'd her head against his shoulder, Greta said; "Just this one. It's a long dance, and I think we can slip out when it ends. Come on, play up and pretend you're deliriously happy with me."

He swung her through the movement of the dance, then they paused for a moment, making a pretense of consultation before he led her toward the exit at the back. There were gravel paths beyond the outer door here, winding up the slope among the trees, with muted lights set close to the ground to prevent stumbling. "Put your arm around me," commanded Greta, as they passed a turn-off that led to one of the summer-houses. "We have to make it look good, even if we don't feel that way."

"But I do," said Braun. "That's just the trouble. Here's the one, I think."

He swung her round the curve past a screen of bushes and up to the summer-

"Come out of it!" Greta commanded



house. A light flashed dazzlingly in their faces, then shut off abruptly, and Paul Frasser's voice said; "It's all right. We're here."

The little kiosk was intended for only two people, and the four of them had to squeeze close into the seat. Somebody touched the transparent weather-shielding into position, and Toijiru Shigem-

itsu's voice said out of the dark; "This is a very special meeting, particularly for you, Greta. They're getting ready to move."

"I know that already," said the girl.

"You don't know all of it. Your father is going to have an order of acquaintance put through the Eugenic Committee for you."

There was a momentary silence. Then Greta said, low and hard; "I won't accept. I'll reject the acquaintance even before it starts."

"You had better hear the rest of it," said Shigemitsu. "He isn't going to offer it himself; in fact, I wouldn't be surprised if he pretended to object. The acquaintance is one he could object to—Lajos Harkavy, who's going to be leader of the psychs as soon as he is declared adult."

They couldn't see her mouth work in the dark, but it was a minute or two before she answered. "I've heard of him. Isn't he—?"

Shigemitsu said; "He has one of the best intelligence numbers ever recorded, lower even than yours. The Eugenics Committee will put on every bit of pressure it can to bring the acquaintance to a marriage."

IN THE dark someone who must have been Edgar Braun touched and squeezed the girl's hand as Shigemitsu paused and then went on: "The trouble is that Harkavy's temperamental rating is bad—"

"I thought that one of the reasons I was working with you people was to do away with all that."

"Let me go on. I use the word 'bad' only in the sense that the advanced group use it. Harkavy has psych training, but he appears to be more interested in painting, and Paul's contacts say that he's pretty lazy, just about the type the advanced group would want to use as a stooge. With him at the head of the psychs, they might be able to get through any number of new regulations—even the one they've been trying for to make all marriages compulsory."

Paul Frasser's deep voice added; "They might even make their own group into a kind of sacred priesthood; without the psych vote, we're outnumbered badly in the Association."

Greta said; "They're a priesthood already, a grinding priesthood that has already wiped out nearly every hit of

personal liberty in the worlds. Why, think, if—"

Shigemitsu said; "Yes. But we haven't much time."

"All right, then," said Greta. "The practical question; what do you want me to do?"

"Accept the acquaintance. We haven't any grounds for protesting it now before the Eugenic Committee or in the Association, and we don't understand what's going on. Perhaps your father suspects you of working with the moderates, or perhaps it's only that he wants to bring the psychs to his support somehow. Find out what this Harkavy chap is like and what he intends to do. Find out what his connection with your father's group is. Plant a spy-ray on him if you can."

Greta shivered a little in the dark, although it was very warm with the four of them in the restricted summer-house. "You remember what we were talking about? What if my father's group succeeds in getting through the regulation making marriages compulsory after an acquaintance has been accepted? And I'm stuck for the rest of my life with this—this—"

Shigemitsu said quietly; "I have two sons. One of them had scientific status, and went to Venus. He didn't like what was happening in the swamp-mines there, and he couldn't get anyone interested, so he tried to organize some of the servs themselves in protest. They tried him for trying to elevate civil authority over scientific, reduced him to a tech, and sent him to Freya. He's still there, oh, quite happy when we hear from him—breathing in that Freya atmosphere and unable to do his own thinking. He will probably live another hundred years, but we count him as already dead."

Greta shivered again and rustled upright. "All right. I see what you mean. Only it's a little hard to take a chance on mortgaging your whole life just to find out something that ought to be easy to find out, anyway."

THE LONG VIEW

Braun held the door open for her, then followed her out onto the path. The sound of footsteps came from somewhere up the slope, and she said; "—lovely, but I do want one more drink before we go home."

"You're entitled to one more at least," he said aloud, then under his breath and with his head close to hers; "Greet! There's one way you can get out of this acquaintance, and not have anyone object. You can take up a non-marriage connection with me. Will you?"

"No, Edgar." She put a hand on his arm. "I wouldn't be in this at all if I didn't believe that everyone should be allowed to live his own life, without scientists or anyone else telling them what to do. To do what you suggest would be choosing compulsion to avoid another."

Behind them in the dark Paul Frasser said to Shigemitsu; "She is very young. One might almost think that she really considered emotional decisions as having value. Are you not afraid that this Harkavy will convert her fully to the psych position? It would be a pity to lose our best spy in the advanced group."

"I don't think you need to be concerned," said Shigemitsu. "If we lose our spy in the advanced group, we gain one with the psychs. She can hardly refuse to continue working with us in view of what we could make known of her past activities. A charge of betrayal of trust is quite as serious as one of inciting social unrest to the advantage of the civil authorities."

IV

WHEN the annunciator sounded, Greta was deep in the Diophantine analysis of a second-order Riemann equation. She sighed, put down her calculator, shot the results thus far attained into a recorder, and pressed the button. The face that looked from the box was that of a stranger; young, thin and straight, with lines of humor

showing around the mouth.

"Miss Manning?" it said.

"Yes."

"I am Lajos Harkavy. May I see you for a few minutes?"

"Why—I thought you were on Uller."

"I was. That's one of the things I want to see you about."

Her face became ever so slightly frigid. "I don't know—"

"Surely you can spare me a few minutes—under the circumstances. I'll even promise to be entertaining."

"All right. It's the 8 button, 42nd story."

She frowned as she switched the connection off, touched the inter-room communicator and made sure her father wasn't home, and almost as a reflex gesture, checked her eye-shadow before the entrance-wall slid back. He was taller than she expected, and wearing an inflatable as though he had just come from a space-liner.

"Won't you come in?" she said, indicating a chair.

"Thank you." He waited for her to sit down before taking his own place, and it occurred to her that was exactly what an irrational psych would do, expecting her to be impressed by the antique minor courtesy. "I understand we have been named for an acquaintance," he said.

"The Eugenics Committee passed it this morning. How did you find out so quickly?"

Lajos Harkavy smiled. "Not very difficult. Even out on our little paradise on Uller there are copies of the priority lists, and it wasn't hard to guess that with our respective ratings, they'd at least make a try at bringing us together. What I want you to do is reject the acquaintance."

Greta felt a totally irrational anger at being asked to do what she had herself intended to do. "Indeed!" she said. "May I ask why you don't reject it yourself?"

"You may. And I'll answer that it's for reasons personal to me, which won't

seem logical to you as an advanced scientist, but it will have to do for the moment. I want to present you with the reasons why you should reject in your own interest."

"And what are they?"

He looked around the room. "I notice you haven't any room-spray on, and not a single picture in the place. You wouldn't like the way I live. I like sprays, I like fun—and I paint pictures." This last was uttered with subtle overtones of defiance.

"That might turn out to be the basis of an incompatibility making a rejection of marriage necessary after the acquaintance period. It isn't one for rejecting the acquaintance."

He grinned. "All right, you're an advanced scientist, and I'm what you would call a psych, with a poor temperament rating. I find pure mathematics, or pure science of any kind, an unholy bore. What could we say to each other, or do together, during an acquaintance?"

Greta said; "That's what you said before, only you're putting it in other words. It's an ingenious device in dialectics, but you'll have to do better. And besides, my own temperament rating is 39; I could just as easily be a moderate. You're making assumptions."

HE GRINNED sardonically. "And you're trying to change the ground of the discussion. I'm onto that one. Let's see—why else should you refuse the acquaintance? For one thing, I'm living on Uller, at least until I finish the series of paintings I'm working on. You wouldn't like it there."

"You don't have to tell me. I looked it up when this acquaintance warrant came through. The weather is terrible, the water tastes like soap and has to be distilled, the animals are foul, and you have to use an artificial day-night routine. That only answers your last objection. There would be plenty we could do together, mostly on the adventure side."

"What ambition!" said Lajos, and stretched his legs lazily. "And what an ambition! But don't think you'll get me into anything like that. I prefer air-conditioned rooms with a slight spray in them, and the only adventure I'm interested in is the kind that concerns—females."

"And yet you want one to refuse an acquaintance! I'm still waiting to hear why I should."

For answer, Lajos got up and paced slowly across the floor, then back again. Then he came over to Greta's chair and in a new voice, quite low, said; "Is there any chance of a spy-ray around this place?"

"I don't think so, but—"

"No, I don't dare risk it. But believe me, there's a very good reason, not connected with myself at all—"

Greta stood up. "Now you've made me curious. I suppose that, being a psych, you deliberately applied the stimuli to bring it about, but you succeeded. There's a park just across the river on the old Palisades. Let's go look at nature."

He didn't say anything more as she dialled for the duty serv to bring the runabout to the terrace, or when they got in and soared away across the stream, and she was well enough aware of the possibility of a spy-ray being planted in the machine not to say anything either.

The park was bright and green in the fresh spring air; Greta parked the runabout at the entrance and they strolled down a walk between a double row of monstrous blue lilies from one of the outer planets, to a bench.

Greta seated herself and said; "Now will you tell me about it?"

He frowned. "All right, I will. It's just this: if you follow me to Uller on an acquaintance, there's a good chance you may never be able to get back."

"Why not?"

"Your father hasn't told you? About the shortages? And the reason why the production committee has been moved

to Venus? Didn't he tell you?"

She shook her head. "Not a word."

"It's a pretty carefully guarded secret. But the essence of it is that there's a major shortage of beryllium, and it's system-wide."

"For moderators in power plants and ship drives? Why can't they use the old-style carbon moderators? They still do in some places."

"On planets. You forget that when you use a carbon moderator in the double reaction for interstellar drive, it's so inefficient that it doubles the consumption of fissionables. The system has enough uranium to hike along for quite a while yet on normal consumption rates, what with the discovery of an occasional new planet that can be worked for uranium, but if you double everything up, we'll soon be in the position they were here on Terra when the oil reserves began to run out."

Greta said; "That is, things slowing up everywhere, and revolutions, and—"

"Not quite as bad as that. There are plenty of power sources and plenty of uranium to keep the planets running individually, and even for interplanetary travel, where there are two habitable planets in the same system, and they only use the primary reaction drive. But interstellar travel is going to go right out the window, and soon. That is, unless something happens."

"So that's why—" began Greta, and flushed.

"Why what?" said Lajos.

"I was just going to say that must be the reason for that regulation last year—the one restricting interstellar travel to people with scientific status and requiring an authorization from a local board."

"I daresay that's part of it. But it seemed to me that you were going to say something else."

"You psychs are too clever by forty per cent." The girl's voice had an edge

[Turn page]

oh-oh, Dry Scalp!

... IMAGINE ME dancing with a scarecrow! How can he be so careless about his hair? It's straggly, unkempt, and . . . Oh-oh—loose dandruff! He's got Dry Scalp, all right. He needs 'Vaseline' Hair Tonic."

Hair looks better...
scalp feels better...
when you check Dry Scalp

HE TOOK HER TIP, and look at his hair now! 'Vaseline' Hair Tonic can do as much for you. Just a few drops a day check loose dandruff... keep hair naturally good-looking. It contains no alcohol or other drying ingredients. Gives double care to both scalp and hair . . . and it's economical, too!

Vaseline HAIR TONIC
TRADE MARK ®

to it. "Thank you for the information—and for your solicitude about my welfare. Now I'll give you a piece of information, too. I never had any attention of accepting an acquaintance with you, and I wouldn't accept one with a man who paints, even if he had an intelligence rating of point one. Does that answer your question?"

TO HER surprise, Harkavy merely rose from the bench, and stood frowning. He was very tall, she observed. "No," he said, "it doesn't. Not at all. I don't understand why a member of the advanced group, who would be left in control of practically everything if interstellar travel were cut off, and could sit in their corners doing mathematical puzzles all day while everyone else worked for them, should develop so much heat over the prospect."

"You don't have to—" she began, but before she could say any more two figures in the decent blue uniforms of Regulator Techs turned the corner of the path and came straight toward them. One of them stepped up to the young man.

"You are Lajos Harkavy?" he said.
"Yes."

"Please come with us. The charge is making an unauthorized interstellar voyage, contrary to regulations."

Greta clutched the arm of one of the Regulators. "What are you going to do to him?"

The man shrugged. "It's a major regulation. Probably they'll deport to Freya as temperamentally unstable. That's the usual line."

"But you can't do that!"

"I'm not doing it," said the Regulator. "If you've got a song and dance, give it to the Rating Committee."

Greta said; "You can't do it, and I'll tell you why. We both have scientific status, and this is the first day of an accepted acquaintance. I think the order of the Eugenics Committee takes precedence over any violation of regulations except acts of violence. And I

don't want to go to Freya."

"It sure does, lady," said the Regulator, stepping back, and turning to his companion; "Get your phone out and check that, will you, Morgan?"

V

GRETA stood looking out the window toward where the depressing landscape of Uller stretched under brown, rubbery grasses to the shore of the slick-looking Matteran Sea. A lorcha was coming in from the Cape Holland fishing station, the deck-hand swinging his arms to keep warm, as he waited for the craft to slide in to the gate of the processing plant where he could hook in the automatic draw.

The girl said; "The spy-ray was a mistake. He waited until he said good-night, then handed me the disc and said, 'By the way, here's your plaything. I like to keep a certain amount of privacy.' I suppose I had it coming."

Paul Frasser did not stir from his seat. "A man with his intelligence is hard to handle. But I'm beginning to wonder if the whole operation wasn't a mistake. From what I can make out, there's nothing in him we can use. All he's interested in is painting and night-spots."

Outside the sun rim met the horizon redly, and the day wind that had ruffled the surface of the sea to long undulant swells was falling. Greta turned, the edges of her hair redly outlined by the light.

"There's something—almost mysterious in him," she said. "And after all, he did find out about the beryllium shortage."

Frasser grunted. "That could have happened in a number of ways. After all, he's going to be titular leader of the psychs some day. Maybe someone in your father's group thought it would be a good idea to let him know. What does he say about it, by the way?"

"That it's a problem for applied

scientists, and he isn't interested."

"That's what I told you, Gree. People who put a wall of mystery around themselves generally haven't much behind it except a desire to amuse themselves, and I will say that Harkavy is devoting himself to that with all the resources of his high-power intelligence. Calling him mysterious is just a relic of the pre-scientific age. What's mysterious about him?"

"Well—he won't even sleep at my quarters.

"Is that surprising? Probably has someone coming to his. It wouldn't be the first time it had happened on Uller. Better break the acquaintance. We have work to do."

The sun was half way below the horizon now, and the lights were beginning to stream automatically from walls and ceiling in compensation. Greta Manning shook her head:

"No, Paul. The job of trying to make it a world, a universe, where everyone gets a square deal whether they have a high eugenic number or not, means everything in the world to me. You know that. That's why I accepted this acquaintance in the first place, when I didn't want to a bit. But I've accepted it now and given my word, and so has Lajos; and I won't pull out and I won't cheat, either."

Frasser snorted. "Emotionalism! Unscientific—"

"Isn't it just to give everybody a chance at unscientific emotionalism that we're doing what we are, Paul? To keep people from being bred like animals for the production of more pure scientists? There are already too many."

Frasser said; "That sounds odd, coming from—oh, well, let's not quarrel. We're in this together, and up to our necks."

"Yes, aren't we, though!" She was cheerful again in a second. "What time is it? I've got to go. I promised Malya Bryussov I'd come over and look at the new method of calculating high primes she thinks she's found, but I don't be-

lieve it's anything more than Lucas and a calculating machine."

THE air-lock at the door hissed slightly as she ran out. Frasser sat in frowning silence for a moment, then got up and put on his heated garments; no matter how long he stayed on Uller, he could not find himself comfortable at a temperature of 7° C. His quarters were on 2nd Street, which meant he had only a brief walk past the buildings of fused sandstone, built squat and monolithic to withstand the hurricane winds of Uller, before reaching the square, with its pylon-like beam tower in the center and the Communications Center on the other side.

Work had just closed down for the day, and in the hall inside people were tapping their communication-boxes for letters and the reels of the day's news. Frasser nodded to one or two, pretended not to notice a superior tech who was coming toward him and would either want a promotion or the endorsement of an authorization for an interstellar flight, and went down the broad staircase that led to the long-range communications room.

"I want a tight-beam communication to Terra," he said to the clerk behind the desk. "To Toijiru Shigemitsu, DD-32-28, New York, Terra."

The clerk started to punch in the numbers, then looked up. "Pardon me, sir, but are you a scientist? There's a new reg—"

"What the hell would I be asking for an interstellar tight beam for if I wasn't?" demanded Frasser. He fished in a pocket, produced the metal identifier, flung it on the counter, and viciously punched his thumb down on the checking machine. "What's your name and number? You deserve a report for disrespect."

The clerk's lip trembled slightly. "Ector Mariscal, sir, RB-122-18. I'm sorry, sir, but I hadn't seen you before."

"All right," said Frasser. "I'll drop it. When will you have the beam set up?"

"I don't know, sir. They're having a little trouble at Station No. 6—a gonflar got in and damaged the tower—and Terra may be on that side. But I'll put an urgent on it. Do you want me to call you at your quarters, or will you take it here?"

"Might as well wait. I haven't anything else to do."

"Will you take the fourth compartment, sir? You know where the reels are?"

Frasser nodded, initialed the five-unit chit the clerk shoved at him, and pushed down the hall to the compartment marked "4," where it occurred to him to have any incoming calls at his quarters transferred to the Center. A light spray would do him good, he decided, so he turned one on, and then settled himself to contemplate the reels of the day's news. There was a picture of the gonflar being driven from Station 6, one after another of its six legs developing an odd hurrying motion as the stimulus-whip was applied to that section by armored guards; a mentally unstable tech who had murdered his wife was telling his tale to a psych; and then a woman with a long face began to explain how much she would do if elected—and Frasser turned the machine off.

FROM the speaker in the wall a voice said abruptly; "Your connection, sir," and Shigemitsu's voice followed, slightly blurred by crossing light years of space; "Toijiru Shigemitsu here."

"Watakushi-wa ufa-wo kiki-tai," said Frasser.

"Sora wa umai," came the answer. "I think we may omit the remainder of the challenge and response, my friend. I recognize your voice. Why do you call?"

"She's getting balky. Resisted the suggestion that she break off the acquaintance before it ran its full term."

Shigemitsu said; "Have you considered that he may have decided that it would be useful to turn the connection into a marriage, and is applying his knowledge of psychology to her?"

"Bah! It's just those romantic ideas we noticed before she left. She talks about having given her word, and that sort of thing."

"You don't think she's really attracted to him?"

"Only to the biological function extent. Otherwise, he's about as useless a piece of furniture as I've ever seen."

"Still, it might be useful to have him at the head of the psychs and her in our interest."

"He's going to refuse the appointment and turn artist. At least that's what she thinks. And she's too valuable a piece of property for our side to be wasted like that."

"I see." Shigemitsu was silent for two ticks. Then: "The other matter?"

"You mean Rizzi? I don't think we can bring him over. I talked to him for a couple of hours. He agreed that there was a strong possibility that Nifheim was extremely rich in beryllium, just as you deduced from the registers. Also that there would be a big promotion waiting for anyone who could find a way to get at it through that fluorine atmosphere. But in the first place, he didn't think it could be done, and in the second, he didn't seem interested. Wants things to go on the way they are. After all, he's an 18, which would make him pretty close to No. One man out here if all interstellar travel were cut off. He's an applied scientist, sure, but there aren't more than two or three pures on the planet."

"Did you try putting the girl on him?"

"Yes, and ran into more romantic ideas. She said that she wouldn't cheat while conducting an acquaintance with Harkavy."

"My friend," said Shigemitsu, "you are insufficiently subtle. It is a quality of race which has nothing to do with intelligence. I think I perceive the answer to our problem. You are keeping a careful check on Harkavy's movements?"

"As close as I can. The spy-ray failed;

he found it where she planted it and gave her back the disc, so I had to go back to primitive methods and have him personally followed. So far the reports have been devoid of interest."

EVEN over the long-range beam, Frasser could hear the slight hissing sound with which Shigemitsu habitually began one of his trap-questions. "What do the reports concern?" he asked.

"Matters like this; subject spent the afternoon in a glassine hut on Cape Lion, painting a view of the Matteran Sea. Subject spent the evening having dinner with his acquaintance, took her to her quarters after a session in the game-room, and then spent a good part of the night at the Cave of the Four Winds night-club in the company of a lady who calls herself Roselle La Blanche, and who makes a profession of exhibiting her torso—"

"One moment."

"Yes?" said Frasser.

"You have the key to the situation in your hands. How often do these night-club visits take place?"

"Frequently."

"And you have just told me that the girl will not, as you put it, 'cheat' while conducting an acquaintance with Harkavy? Does it not occur to you that she would take an unreasonably romanticized attitude toward his connection with this ecdysiast?"

"I never thought of such a thing."

"Begin thinking of it." Shigemitsu was crisp. "You are dealing with a person who lacks the normal scientific objectivity, a temperamental 39. Arrange to take her to this night-club when the two of them are there together. You will not need to apply any other pressures."

VI

HER VOICE apologetic, Greta said; "I'm sorry I couldn't make it last night. But I was working on a new postulated geometry that turned out to be per-

fectly logical at speeds in excess of a prime. The beauty of it is that it's perfectly useless; there aren't any speeds in excess of a prime."

Frasser gazed at her a moment. "I sometimes wonder if that isn't the trouble," he said. "You people in the pure sciences have precedence over everyone else, but the only time you're happy is when your work is useless. And now the machine is running down. Are you going to wear that?"

Greta glanced down at her costume, which was being touched to multi-colored flames as it caught the lights from walls and ceiling. "My rainbow dress? Why not? It's a party."

"It's unusual for the guests to wear luminant clothes in the place we're going. It's a little on the rough side, and they're apt to be taken for—well, professionals."

"Oh." She considered. "I don't suppose it would hurt me to be propositioned, but you're probably right. Wait a minute." She disappeared into the back and presently returned in a dress which, while still definitely for the evening, gave off only soft tones of green. Paul Frasser tried the communication box, found it locked, and was gazing at the ceiling when she came back. "I have the flier on the roof," he said. "It didn't seem worth while bringing it in for the time I'd wait for you."

He stepped ahead of her to the elevator. "Where is this place?" she asked as they emerged on the shadowy roof, shivering slightly at the impact of the chill Uller night.

"Way out past the cape. Most of the habitues come from the tide-control project; techs and servs, and a fairly hard gang at that."

The flier took off smoothly, bucked once, and straightened out on course. Far below and to the right there was a blaze of brilliance around New Ravenna's interstellar port, and conveying machines were waddling clumsily up to deposit their burdens in the huge bulk of an interstellar freighter.

STARTLING STORIES

"They're pushing it hard on liquid silicones from the fisheries," remarked Frasser. "Trying to stock-pile lubricants against the date when there won't be any interstellar travel."

Greta shuddered slightly beside him. "But what's going to happen to all those people?" she asked. "The techs and servs who have been brought in here to do the work on the promise of more money and quick home leaves?"

"They'll have to stay on Uller, that's all. But I think sympathy for them is wasted. They're not first-class minds and the resources of this place are sufficient to provide everything they really need. What gets me down is that your father's precious advanced group is quite ready to put applied scientists in the same category. Getting the warning about the beryllium shortage is one thing we can thank-you for."

"Have you been in touch with Shigemitsu?" asked the girl. "Is he going to do anything in the Association Council?"

"I doubt if he'll try to do anything immediately. If he would make the information about the shortage public, it would not only stir up the techs and servs, but the applied scientists would be charged with the responsibility for not having foreseen and provided against the shortage, and as a result, our moderate group would be just about blown apart."

"If we could only . . ." began Greta; then, "There's the Cape."

"I have it on the screen. Button up, we're going in." He worked controls. Below them, the contours of the formless black mass of the night club building were picked out by infra-red in the moonless night of Uller in answer to his landing beam, and as the flier slid in, servs hooded against the cold came running out to guide it to the ramp of the underground hangar.

The door cut off the stars behind; Paul Frasser handed Greta out, accepted the offered check and steered her toward the elevator, where a bored serv

slowly returned to his pocket a reel and the eye-piece through which he had been contemplating it.

THE first thing of which Greta became conscious when they reached the level of the club itself was a quantity of spray in the air that almost made her head swim; the next was that the place was circular, and in accordance with its name, was decorated to resemble some huge, rock-hewn cave back in Terra. There was no dancing at the moment; the decorative scheme had been carried into the permanent music, which was that of winds howling through an aeolian harp. The lights were dim; she had reached their table before she could see enough of her surroundings to make out that Paul Frasser had not exaggerated about the character of the place. Most of those present were clearly techs and servs, some still in their working garments, accompanied by shrill-voiced girls to whom the low level of the lighting was a charity.

Frasser ordered drinks and looked around. "Well, what do you think of low life?" he asked. "Some of the dancing is really remarkable, though."

The spray was having its effect; she felt a thrill of adventure tingle up and down her spine. "Do they have fights?"

"If they do, they're stopped pretty quickly. Do you see those two techs at that third table? They're Regulators. Hello, there's Derek Hyde!" He half stood and waved to a man sitting alone at a table across the room, who got up and sauntered over, bringing his drink.

There were introductions; Derek Hyde accepted an invitation to join the couple, and it was explained to him that Miss Manning had come for the dancing.

"Good idea," said Hyde. "It's better in a place like this than in the regular establishments. More emotional and unrestrained. They have one girl here who would be wonderful anywhere in the system. Her name's Roselle La Blanche, and I think she comes from Venus; how

she drifted here, I haven't any idea. Just about due, too."

The music became one of the quick double-steps from the inner planets and couples covered the floor Greta said: "Where do the women come from?"

"Most of them are servs from New Ravenna," said Frasser. "They have to have an ostensible profession, you know."

The music stopped, but instead of taking up its windy background rhythm again, swung into a quicker pace that changed and rose to a pitch of the most intense emotion. Then, suddenly, all the lights went out, to flash back on as abruptly, showing a girl standing alone in the center of the floor.

"That's her, now," said Derek Hyde.

There was no doubt that she was somebody, and fully conscious of it, as she caught up the beat, and with a slow, seductive movement, began to weave through a figure, the strings of opals in which she seemed to be entirely clothed

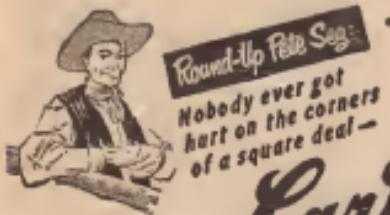
picking up the light from floor, wall, ceiling, in a thousand shifting patterns. One of the opal-chains came loose and slithered across the floor as she moved; then another, and another, as the men in the audience began to shout and stamp, until finally, in a sudden whirl of motion, she lost the last chain of opals just as the helmet of dark hair broke from her head to cover her nearly to the knees and the lights were extinguished for a second time.

"You were right," said Gret, "that was wonderful."

"So is she," said Paul Frasser. "I wouldn't mind knowing her myself. In fact—"

Derek Hyde turned toward him. "It's no use, old man. She's already got a connection—with that high number psych out here. You know, the crazy one, that's turning down his scientific rating to be an artist. Harkvaly, or something like that."

[Turn page]



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AS THE emotion-intensifying spray touched her, it set Greta's fingers to gripping the table so hard they hurt. In a quick intense voice, she said: "Do you mean Lajos Harkavy?"

"Yes, that's the one. Why?"

Frasser said: "Miss Manning is here on acquaintance with him."

"Oh, look here," said Hyde, "I'm sorry. I didn't mean—"

"Paul," said Greta, "get the superior serv. I want to talk to her at once. I don't care what it costs. Use my rank. I want to talk to her. I have to talk to her."

Around them the music had risen again and couples were dancing. As Frasser beckoned for the serv, Greta's hand went out in an impulsive gesture and tipped over her drink, but it sank at once into the absorbent table.

Derek Hyde said again, "I'm really sorry—"

"It doesn't matter," said the girl. "Please go away."

Paul Frasser said, "Really, Greta, I had no idea—"

"It doesn't matter, I tell you. I want to talk to her."

Roselle La Blanche came down between the tables behind the superior serv. Her hair had been hastily gathered up, and she had thrown something around her; the techs whistled at her as she passed, and one or two of them tried to pinch her.

The superior serv said, "This is Miss Manning. She's a high-ranking pure scientist and wanted to talk to you."

Roselle La Blanche slid into the place vacated by Derek Hyde. "To me?" she said. "Why, certainly, honey, though I don't know what about, I don't know about anything that would be good for a pure scientist." She giggled a little.

Greta said, "About just one thing. Do you have a connection with Lajos Harkavy?"

The beautiful, slightly vapid face of the dancer hardened. "I don't know that it's any of your business."

"Tell me!"

"You're being emotional. Honey, they always told me that people with scientific rating were rational. I was going to ask you for a unit and a half for bringing me out here, but I'll give it to you for free. You oughta take a treatment." She stood up, flashed a come-on smile at Frasser, and was gone.

For a minute Greta didn't say anything. Then, with both hands on the table, she said, "Paul, have you a message going soon?"

"Yes. It's technical."

"Make it partly personal. Tell Edgar Braun I'm coming back to him as soon as the next ship leaves. And take me back to my quarters."

At the elevator, he checked suddenly. "Dammit," he said, "wait for me. I forgot to leave anything for the serv."

But it was not the serv he hurried back into the club to speak to; it was Derek Hyde, and he said, "Here. You did a wonderful job. It worked out just right."

"I'LL GO with you because I promised," said Greta. "But you might as well know now that I'm going to refuse the marriage." Her voice was flat.

Lajos Harkavy stopped tightening the strap on his portable easel. "Any particular reason?" he asked.

She felt herself flushing and half-turned her head. "No. Just the general one that we don't seem temperamentally suited to each other."

"I would have said quite the opposite. In fact, you make me wonder, frankly, whether some ulterior factor has not developed that—"

"Oh, you and your psychology!" She stamped her foot, and then suddenly flashed into a smile. "There's no use quarrelling about it though, now. Let's have as good a time as we can out of what's left. Where are we going?"

"To a place about eight hundred miles north of here—MacMurray Forest. Ever hear of it?"

"Didn't some of your pictures come from there?"

He slung the easel and box of paints on his back. "Yes, but not at this time of year. The colors are really spectacular when the leaves begin to come out, and I want to try to catch them with luminescents that will give the effect of changing light. Got the food package?"

He pushed the button for the wall slide, then clicked the communicator. "Harkavy. Will you send my flier up? and drop a report on wind conditions at seventeen degrees north, MacMurray Forest area on the seat."

The sun was just coming up to the southeast as they stepped out of the elevator head onto the wind-blown roof and the sky was streaked from south to north with long fingers of dun-colored cloud, red along their lower edges. Greta glanced at them and said, "Could you catch something like that with your luminescents?"

He shook his head. "I could probably, but it's too opaque to produce an emotional reaction. That would only be representational painting."

"But how do you go about it if you want to tell the people who look at your pictures something about the feeling we get up here on the roof at dawn, with hardly a flier in sight, and the loneliness and this gloomy city below. We could be the last people on Uller—or the first. Oh, I wish—"

He glanced at her sharply. "What?"
"Nothing. Here comes the flier."

The plate in the roof slid back and the flier appeared on its elevator, looking rather like a pious insect with its vane-cases folded over its back. Lajos climbed in, took the food package and painting equipment and snapped them into a locker, then said, "Button in tight. I'm going to give her a rocket shot unless you think you want to look at the scenery below."

"No thank you. The scenery on this planet doesn't impress me. In fact, I could do without it for the rest of my life."

He fingered the controls and opened the key to the rocket fuel line. "Is that

why you've decided not to go through with the marriage?"

"No, I— Oh, stop trying to fish around in my mind."

HIS only answer was to step on the power button, and Greta was jerked sharply into the buffers as the flier slanted upward with air screaming around it. The rocket cut out and the pressure eased as they began to tilt downward; Harkavy set the vane-openers to automatic and said, "You're right about the painting. It's up to the artist to convey every type of emotion—to find means to make absolutely anyone experience what he felt at the time. The only trouble is that I wouldn't know how to go about making a given member of the advanced group experience any emotion whatever."

"I'm a member of the advanced group."

"Only by heredity, and with a low temperament rating. One of the difficulties of our so-called civilization is that the capacity for emotion has been practically bred out of the upper scientific levels in the interest of obtaining eugenic qualities that will give greater intelligence. And if the advanced group succeeds in putting through the regulation making it impossible to refuse a marriage ordered by the Eugenic Committee, it will be worse than ever."

"I hadn't thought of it that way," said Greta. "But it did seem to me that the regulation would be—unjust."

There was a clicking as the helicopter vanes took over. Harkavy peered downward to get his bearings, took the wheel and said, "A desire for justice, in fact, even the concept of justice, is a purely emotional matter itself. Unscientific. Don't you remember studying about some of the archaic political states on Earth, where the elected non-scientific authorities could declare certain things were true or not, even prohibit scientific research along some lines?"

Greta said, "I should think that, feeling the way you do, you'd try to do

something about it. The new marriage regulation, I mean. After all, your intelligence number is low enough to make you a policy-maker."

Harkavy shrugged. "Association politics doesn't interest me. Evolution will take care of the matter in time. Although if it's controlled as sharply as the advanced group wishes, man is certainly going to evolve into two subspecies, one species with all the intelligence and no emotion, and the other absolutely the reverse. In fact, I think we're some distance along that road now."

"You're a fatalist." She leaned over to look at the incredible sight of an Ulteriorian forest swimming up toward them, with its curious wilted-looking thin-trunked trees just breaking into the tenderest of green leaves at the tips of their branches, the sunlight touching the spicules of quartz in their trunks to a thousand changing colors, while here and there a dead tree stood like a single milky jewel.

The flier sank smoothly toward a cleared area in a valley between two hills, did a slight upward slant and came to rest on the slope. "Let's eat our breakfast inside," said Greta. "I don't mind glassine, but you'll need all the space in the hut for your painting things."

"All right. What's the menu?"

"I have no idea. The hostel put it up; I just told them I wanted two meals for two people, one of them a hungry man."

She produced the three cans marked for breakfast, turned the heating keys and began to lay disposable dishes on the table Harkavy detached from the wall.

"Continuing our former conversation," said Harkavy, "what both the pure and applied scientists have lost sight of is that the original purpose of science was to serve mankind as a whole. They look down on us psychs and barely allow us the name of scientists, but it's something we can't forget, because people are our raw material."

"Oh, I don't think the moderates have forgotten it," said Greta. "They just don't want all their researchers under the control of the advanced group, and for their interests. Here, try some of this. It smells delicious. Meat of some kind. By the way, there aren't any animals around here, are there?"

"Not likely to be," said Harkavy. "That is, not dangerous ones, although there might be a few little 'cone-cats around. The gonflar country is down toward the sea, and you don't usually find burex unless there are gonflars for them to prey on."

WHEN they finished the meal, Harkavy decided that the view from the opposite hill was better and got out his equipment to walk over. Greta accompanied him to the hilltop, but after he had set up his glassine hut and begun to work, he began answering her remarks with a series of grunts, so she went outside to wander among the trees and look at the mosses that crawled over the ground under them in patterns as intricate as snowflakes.

She could see quite a distance between the thin trunks so there wasn't any danger of getting lost, but she herself hardly realized how far she had gone until she heard a shout muted by distance and turned to see Harkavy waving her frantically toward him. As she ran toward him she became aware of a muffled roaring sound in the distance like the sea beating on a beach, and abruptly she was running into an increasing gusty rush of wind. A fallen opalescent log caught her foot, and down she went, with a sharp shard from one of the broken branches penetrating her cold-suit and cutting her knee, but she was up again in a minute and running. Out of the corner of her eye, she caught a flicker of something white, and then she was beside Harkavy.

"Too late," he said, pointing. The whole area between them and the hill where the flier stood was filled with tossing waves and beyond it toward the

south a white crest was rushing, while the continually rising wind tore at them.

"What is it?" she asked.

"The spring bore. It's my fault; I forgot about it; I even forgot this was the right area for it."

"What's the spring bore?"

"You haven't been here long enough to learn about all the niceties of our climate. You know the poles freeze in winter; big ice-caps melt almost as large as those on earth. When they begin to melt in the spring, the rivers start running toward the central seas, but at first it's only a trickle here and there, because ice-jams form at their source-points. Then one day the water pressure behind gets to be too much for the ice-jam, and she goes out like that."

"Will it last long? Can we get back to the fier?"

"Can't tell how long. May have to stay here over night, maybe not. Let's get the hut braced, though. The winds that follow these bores are usually something."

He worked more rapidly than she would have imagined, picking up fragments of the quartz tree limbs and stacking them around the base of the invisible glassine hut. Greta limped after him until he stopped her with; "You'd better get inside and sit on my chair. Moving around isn't doing that cut on your knee any good, and the first aid kit's over in the fier. Here, wait—"

He ran rapidly down to the shore of the roaring torrent and returned with a piece of ice. "Here, put this on it. That will stop the bleeding."

"Isn't it silicious?" asked Greta.

"Not enough to worry about. Spring ice is pretty clear; you can even drink the water from it."

Greta said, "Ouch" at the touch of the ice, then, "Do you know, I was thinking about your luminescent colors and the effect of changing light. In math we have a series of equations known as the Weierstrass analytistics, a development of Hamilton's work in optics. I think a formula could be worked out on that

basis which would give you perfectly predictable results, even with luminescent colors."

Harkavy frowned. "I thought you pure mathematicians were disinterested in practical results," he said. Then, "It isn't just a matter of predictable results in a physical sense. We know pretty much what we're getting that way, even with luminescents. It's the resulting emotional reaction that concerns us as painters. That's where the whole quarrel with the advanced group lies. They aren't prepared to admit as a science anything that doesn't give a predictable result."

"Elementary school observation, Mr. Harkavy." "I know. I was clearing the ground. But I'm convinced that there is a real science of psychology, and the only way we can reach it is by way of the arts, by producing emotions through artistic means and then checking on how we got what we did."

She looked past him out through the glassine wall to where the arms of the rubbery trees were whipping in the wind. "I almost wish—Lajos, what's that?"

A LONG the direction of her pointing finger, among the trunks, a creature like a biologist's nightmare was shuffling toward them, its reptilian head low as it sniffed the ground, and its three pairs of squat legs moving in uneven undulations.

"Burax!" said Harkavy. "I said there wouldn't be any this far north. Well, I was wrong. He must have smelled the blood where you cut yourself. They've developed a taste for mammalian blood that makes them a little more dangerous than a flock of tigers."

He was working at the side of his painting-case, which dropped open to reveal a white object about a foot and a half long, surmounted by a tube which ended in a transparent conical nozzle.

"What—" began Greta, as the burax, appearing to catch sight of them for the first time, lumbered forward in a clumsy

charge. Harkavy snapped a gap in the glassine, and as the creature closed in, a jet of something white sprang from it, straight into the reptilian face and long jaws. The jet seemed to go right in; Greta saw that where it struck there was a bubbling that seemed to come from the very interior of the animal's head, its two middle legs clawed forward as the front legs doubled up, and it lay twisting and heaving outside the hut.

"What did you do to it?" asked Greta, contemplating that silent agony.

"Gave it a dose of pure hydrofluoric acid. They're just about indestructible to anything else. I'm afraid we're going to be chilly in here, though." He pointed to where the drip from the nozzle of the gun had cut a long series of slashes in the glassine wall, through which the chill was flowing into the hut.

VIII

LATER, talking to Frasser, Greta explained. "—And in the morning he waded over and brought back the flyer and here I am," she finished. "Chemistry isn't my branch, so I don't know quite how peculiar it is, but I do know it isn't usual."

"It's so damned unusual that I can't think of a good explanation offhand," said Frasser. "But it does hook up with a couple of other things."

"What sort of things?"

Frasser frowned, and his rather pop eyes opened a trifle wider. "Look here," he said, "how real is this painting of his?"

Greta sipped from her glass. "Very real. I've seen some of his pictures at the studio, and I saw him begin on one while we were on the trip. And they're good; not that I'm an art critic, but as he explained to me, he's working on the conveyance of emotion by means of pictures, and I think he's getting somewhere. I don't know any better way of telling it than saying that when the light shifts in one of them you seem to feel

something more than that—"

"You talk like a psych—or a low-level tech. However that's not the point. There isn't any chance, then, that the painting is a cover for some other form of activity?"

"It could be. After all—" she gave a little hard bark of a laugh—"I haven't been with him too many of his waking hours and comparatively few of his sleeping ones. He could be running half a dozen things on the side. Like that dancer. But why all the questions?"

"The night before you left Marius Rizzi went to Harkavy's studio and spent practically the entire night there. In connection with your story I think this makes it practically certain that they're up to some scientific activity together. And the only research projects Rizzi has registered with the Uller Council are in connection with carbon-nitrogen-silicone chain molecules, nothing at all about hydrofluoric acid."

"Then the project isn't authorized, whatever it is. Can't you bring charges before the Council?"

Paul Frasser made a mouth. "And take the chance that it's all strictly on the level and I'd run into a false accusation charge? No thanks; Marius Rizzi is a physical chemist and an 18. I'd have to know a lot more about what I was charging him with before I tackled a customer like that. But let's figure this out; you've been in Harkavy's quarters; what's the layout, and is there space enough to house a laboratory of any kind?"

Greta closed her eyes in an effort of memory. "It's down—one of the underground quarters. When you come off the elevator you're in a rather small square room that he uses for a reception room. On the left toward the back is the door of his studio, so." She traced an imaginary plan with her finger. "The studio runs all the way back; it's a big oblong room. Next to it, right behind the reception room, is the dining-room, and running the length of both of them, to the right of the reception room as you

come in, is a long bedroom and living room, with shifting partitions and one of those antique fireplaces."

"No doors or sliding panels that might lead to more rooms?"

"Not off the reception room. It has doors in three walls and the elevator panel. Or the dining room either; that has three doors and the food delivery tube. And I don't think the studio. It would have to be pretty well concealed, and I can't imagine why he'd want to conceal it that carefully. There might be an entrance to another quarters through the bathroom or one of the closets off the bedroom; I never thought of looking."

Frasser said, "I think you better had. We want to be sure."

"But I've broken the acquaintance and given notice."

"I know. But this is so important we can't afford to overlook a thing. I'll tell you how it can be arranged. I'll have someone watch the place and notify you when he goes out, so you can slip in. There's every chance in the world that the door-lock is still tuned to your voice and even if it isn't and you have to get the building officer to let you in, there wouldn't be anything queer about your going to the quarters of an acquaintance. That's why you're the only one who can do it without arousing suspicion—his or anyone's."

GRET A shuddered a little. "I hate to think of how I'd explain myself if he came back and found me there. Why is it so important to find out whether he has a laboratory?"

"Merely because of what you've just been telling me. About some kind of gun that projects high-speed jets of hydrofluoric acid. Do you realize what that means?"

"No. What?"

"Taken in conjunction with the meeting with Rizzi it probably means that our young artist, our time-waster is going to have a try at Nifheim for beryllium, and that he's close to the solution

of the major problem. Do you see?"

"Work it out for me, Paul. I told you chemistry wasn't my branch."

The trouble with Nifheim is staying alive. The atmosphere has a certain percentage of free fluorine, enough to kill you quick, mixed up with a weird collection of the gaseous fluorides of practically all the non-metals in existence. It's been sampled. That looks all right to start with because you can build a protective suit like a space suit out of metal and after the free fluorine has attacked the outer surface and formed a thin coating of fluoride, nothing more happens, just the way aluminum reacts with water-vapor in the air to a small extent. But there are rains on Nifheim and they consist mostly of hydrofluoric acid, which isn't very good for a protective suit, even when it's made of the Vang metal they use in rocket-tubes. The joints aren't very safe and one little crack could play hell with the man inside the suit.

"Besides, there's the little problem of seeing your way around. We just don't know of any glass or transparent plastic that would last more than a couple of hours in Nifheim's atmosphere. A man would be quite blind there, even if he were safe otherwise. The only way to be certain would be to build out of something that already has so much fluorine in it that it can't take on any more. Like Teflon."

"What's Teflon?"

For answer Frasser got up and went to the spool cabinet, extracted a spool and put it into the speaker. "Hubbard's list of elementary chemical compounds," it announced, and ejected the index strip, on which Frasser made his selection. The machine clicked and gurked. "Teflon," it said, "a plastic composed of very long chains of linked CF₂ units. Hardness 4.5. Tough. White to grayish in color, translucent in very thin sheets. Can be extruded and pressed into shapes at temperatures around 205 degrees. Easily machined, requiring no lubrication during the process. Subject to cold

flow under continuous high pressure. As the carbon-fluorine bond is extremely strong, remains absolutely inert chemically at normal temperatures, and cannot be stuck to anything whatever. Known since the twentieth century."

FRASSER switched the machine off. "There you are," he said. "But notice that the man said translucent in very thin sheets, while you said the nozzle of Harkavy's gun was transparent. Sure about that?"

"I certainly am. It looked as though the liquid came from inside the thing and some kind of pressure were applied to it inside the nozzle and from another source."

"Could be. Good mechanical arrangement. They probably made it as a test piece, to see whether their material would stand up without leaking under service conditions. But I don't think there's much doubt that they've succeeded in producing a transparent form of teflon, and they probably have another, opaque form with greater hardness that working parts can be made of. That's Rizzi's doing, damn him."

Greta stirred in her seat. "There's something I don't understand," she said. "Why are he and Lajos keeping it so secret if they're really going to Nifheim and have the means? It would be of immense benefit to the whole of humanity if they could get at the beryllium. Any Council, even the central one, ought to be glad to authorize it."

Paul Frasser's smile was more like a snarl. "If you don't know the answer to that one, you're more emotionally romantic than I thought. For one thing, your father's little playmates aren't too anxious to have beryllium found. If interstellar travel stops, they'll stay right where they are on most worlds, sitting on top of the heap. For another thing, if Rizzi and Harkavy pull it off by themselves they'll gain so much credit and so many votes, right in the association, that they can practically write their own ticket. We won't even be able to

hold the moderates in line. And with a psych running things, we might as well go back to the old days when political officers controlled even scientists."

"I see."

"So the first thing is to find out where they're making the stuff, get the formula if possible, keep them from using it before we can take some action. It's too bad you broke the acquaintance now. You might have been able to make him talk."

Greta said, "We all make mistakes, don't we?" and stood up. "I'll stay in my quarters to hear from you about Lajos being out. Make it as soon as you can; I have my special travel permit, and want to be on my way back to earth."

"Oh, that reminds me," said Frasser. "Your adored parent seems to have become somewhat excited about your breaking off the acquaintance with Harkavy. While you were out on your little jaunt among the burax we got word that Roger Ingelhicle is on his way here."

Greta stopped. "That's queer. He usually only does political errands for father. Like rounding up support for a new regulation or getting somebody dis-enrolled as a scientist."

IX

THE perpetual violent wind of Uller drove the rain in little hard level pellets that stung right through the transparent face-hood of Greta's raincoat as she climbed from the ground car, pressed the lever that would send it into the automatic garage and let herself into the weather-hall of the building where Lajos Harkavy had his quarters.

An old serv was guiding a cleaning machine down the hall. He smiled and lifted a hand in recognition, and Greta wished she hadn't been seen, but there was nothing she could do about it now. She felt her heart beating rapidly, and decided that this was what it must have felt like to be one of those persons who took other people's property—she couldn't remember the word for them—

back in the archaic ages before science took control and the Eugenics Committees bred anti-social behavior practically out of existence.

The elevator slid smoothly downward. Greta stepped across the narrow hall, approached the sonic plate and pronounced the phrases that would give it the combinations of sound that under the subtle analysis of the device would be as much her own as her finger-prints; "This is Greta Manning; one, two, three, five, six, why, piebald, gentian." Frasser had been right; the door slid back and the lights in Lajos' reception room came on.

He hadn't changed anything, but she had hardly expected him to. She turned into the bed and living room, touched the reception room lights to silence and stood for a moment, looking around in the dimmer radiance that flowed from walls and ceiling at her entrance. Right ahead Lajos had moved one of the partitions around the corner where the bed was, probably to use spray while he slept; there couldn't be any door in that corner. To her left another partition with an open swinging door in it permitted a glimpse of the fireplace. He had changed things there, too, making that part of the room into more of an intimate corner for reading, and when Greta went through the door, she saw that a projector was hung on the partition.

The fireplace itself might, just might conceal a panel leading to another apartment; if Lajos were clever enough to have covered up his scientific activity so well, he was clever enough to have thought of that. She stepped to it, touched the light to greater brilliance, and began examining the intricate carving of the mantelpiece for any detail that might indicate a door-button.

With the greatest clarity the speaker in the wall pronounced, "This is Lajos Harkavy; one, two, three, five, six, why, piebald, gentian."

Greta had just time to put the lights out with a panicky jab of her finger

when the light in the reception room came up at the entry of someone and Lajos' voice said, "Come in. I think I can guarantee—" He stopped.

Another voice, somewhat heavier said, "Beg pardon?"

Lajos said, "Be comfortable and take off your cold-suit. I was saying that I had wired this place with detectors so that you need not worry about spy-rays. Privacy on Uller is expensive; we have so little outdoor life. Will you have a spray, or a drink or tobacco?"

Greta crouched and crept toward the back of the room, where at a pinch she might slip through into the dining room, blessing the softness of the silicoid floor.

The heavy voice said, "I do not myself indulge, but I would not find it disturbing if you wish to do so."

Lajos said, "You pure scientists seldom do. What can I do for you?"

In the dark Greta tripped on something and almost fell, but saved herself with the arm of a big chair.

SHE heard the heavy voice say, "Mr. Harkavy, I want you to judge the importance with which my mission is regarded by the fact that, even with the extremely restricted amount of interstellar travel available, I was allotted a reaction car for the sole purpose of coming out here to see you."

"I am honored, Mr. Ingelhide." (Greta could imagine the slightly malicious gleam in Lajos' eyes as he said this.) "You could always reach me on a closed beam circuit."

"This is not a matter that could be discussed in that way. Let us put it that it is a matter of negotiation."

There was a momentary silence in which each seemed to be waiting for the other to say something. Evidently Lajos won, for it was the heavy voice of Ingelhide that spoke first; "I am here as the personal representative of the President of the Association for the Advancement of Science."

"I am more than honored."

"His daughter has just given up her acquaintance with you."

"Yes. She decided we were not temperamentally suited for marriage with each other."

Ingelhide's voice was heavy with disapproval. "In our group I am afraid we cannot recognize the existence of temperamental difficulties as scientific. But I will not labor the point. The heart of the matter is that a certain situation has resulted."

"You mean the beryllium shortage?"

"You know a good deal, don't you, Mr. Harkavy? That is one aspect of it, yes. A certain group calling themselves the moderates, chiefly composed of applied scientists, are trying to make use of the difficulties caused by this shortage to make themselves dominant in the Association, that is, throughout civilization everywhere. We believe they intend to degrade both the pure scientists and the psychologists to the level of techs. I need not point out to you how dangerous this would be, for you personally, and for civilization as a whole."

"Go on."

"The test case will be the proposal for a new marriage regulation, making all marriages proposed by the Eugenics Committee compulsory. The moderates propose to defeat the regulation. As this will constitute a vote of no-confidence in the present Council, a new one would

have to be elected, dominated by the moderates, and they would then proceed with the rest of their program."

Greta could hear Lajos give a little laugh. "Very ingenious, aren't they? But I don't see why you should come out here to tell me about this. I have no vote; I'm not even an adult, officially."

"That is what I came here for. The President of the Association authorizes me to say that it would be possible to pass a special regulation conferring adulthood on a man of your intelligence rating. The psychs would hardly oppose it, and with the help of the advanced group, there would only be a certain number of moderates in opposition."

"I see," said Lajos. "Provided I came out for the new marriage regulation afterward."

Ingelhide's voice was smooth. "Naturally, we would be cooperating. You would automatically have a seat on the Council. It might even be possible to have you given the rating of a pure scientist."

"I am more flattered than ever."

"As for the young lady in question, if it met with your approval, once the new marriage regulation was passed one of the first acts of the Eugenics Committee would be to pronounce a marriage between you and her eugenically desirable."

"You haven't overlooked a thing, have

THE ADVENTURES OF

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IT PACKS RIGHT



you?" Greta held her breath until she almost strangled, waiting for what was coming next. It did not come at once; there was the click as the doorpanel to the studio slid back, the muffled sound of Lajos' footsteps and then his voice:

"Mr. Ingelhide, does this picture mean anything to you?"

"It appears to be a representation of two people standing on a cliff at twilight. Why, they're moving! And the twilight's getting darker!"

"That's the effect of luminescents. The painting hasn't anything else to say to you?"

Ingelhide's voice was slightly puzzled. "It is very skilfully rendered," he said tentatively.

GRETA heard Lajos sigh. "Thank you for the compliment. I came out here to Uller to paint it because this is the only world that would provide me with the necessary effects. And it is supposed to convey the terror of a failing and falling world, in which two people have no resource against the dark but each other. Either I have failed to make this clear, or you have not understood it. It doesn't matter. But surely you can see that you have as little understanding of the emotions that actuate me as I have of the calculations that actuate you. The answer to your proposal is no, and no again."

Ingelhide's voice took on a dangerous edge. "We may be forced to make other arrangements—"

"I have no doubt you will try. Now, listen to me. You think you are offering me the keys of the universe. Bah! I already have greater prospects than any you can dream of, and I shall not be indebted for their fulfillment to a group which intends to fasten a tyrannical stasis on mankind in the name of science. Good-bye, Mr. Ingelhide; I wish you a pleasant journey back to earth."

"If you feel that way about it—"

"I do. Good-bye."

There was the click of the elevator door-panel. Greta heard Lajos' feet go pad, pad, then she was suddenly bathed in light and his voice said, "You can come out now."

Her face flaming, but as boldly as possible, she walked through into the reception room. "I suppose you knew it was me, and not just anyone?"

"Of course. As I told that rather crude gentleman who brought your father's message, I have detectors on the place. The little box just over the door to the dining room, which you probably never noticed, reported that the lights had been on. Since you are the only other person for whom the door has been tuned—I must have that looked after, by the way—it was obvious that

[Turn page]

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IT CAN'T BITE!

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*It costs
no more
to get
the best!*

you had come to the place while I was out, and were still here. I thought something like that might happen when I found I was being followed on going out. That's why I hurried back."

Greta said coolly, "I'm surprised you didn't haul me out for Ingelhide's benefit."

"Oh, that would never do. You see, I know you're spying for the moderates, and I'd rather have you let them know exactly where I stand than turn you in to your father's group. He'd be likely to banish you to one of the less pleasant planets; has no emotion in his makeup, you know."

"Very chivalrous of you," said Greta, trying to make the remark sarcastic. "What makes you think I'm spying for the moderates?"

Lajos put his fingertips together. "First: you tried to plant a spy-ray on me. That's comprehensible in a girl who wants to know something about the man she is probably going to marry, but suspicious. Second: the same ship that brings you to Uller also brings Paul Frasser, an agent of the moderates, and although you have no contact with him on board, you visit his quarters after you arrive. Third: you break off the acquaintance for no assignable reason and at a most peculiar time. Fourth: when we went on the trip to MacMurray Forest, you defended the moderates against the advanced group. Fifth: you slip into my quarters while I'm out to look for something. Did you find it, by the way?"

"Are you sure you're perfectly right on all those points, Mr. Harkavy? No, I didn't find it. May I go now?"

"As you wish." He touched the button for the doorpanel.

As she stepped through, she turned. "Good-bye, Lajos Harkavy. There's one thing about me, though. At least I don't cheat."

She saw his mouth gape in amazement behind the closing panel.

THE clerk at the hostel said Mr. Frasser was out and would be back late,

but had left word that she was to wait if she came and gave her the key. Also an urgent closed-beam transcript had just come in for him; would she take it up?

Paul Frasser's suite had two rooms and a window, but the supply of reading spools seemed limited to technical material in fields that did not interest Greta, and the window offered no resources but the pitch-black clouded night of Uller, studded here and there with a trail of light as a flyer went past. There didn't seem to be much to do but sit down and think, so Greta did that for a while, wondering how much more Lajos knew and what he meant to do next. The latter seemed reasonably obvious; he was going to make a try for Niflheim and its beryllium. But he'd need a special permit to use a reaction car for interstellar travel in that case, and he'd have to get it either from the Uller Council or the main council of the Association, back on earth. And to get either one, he'd probably have to have moderate support in the councils.

Of course! thought Greta, when she got this far, that was the point. That was why Lajos hadn't done anything but let her go when he found her spying on him. He must be already in touch with some of the moderates, and his bold answer to Ingelhide had been deliberately given in her hearing, so she would take word of it back to Frasser. He was playing the same kind of game as the rest, and very cleverly, just as he had fooled her into thinking he was carrying on an honest acquaintance while he was really having an affair with that naked dancer.

Come, Greta, she told herself at this point, you mustn't get bitter, it's bad for your emotional stability. Where were we? Oh, yes, Lajos must have been in touch with the moderates. Then the closed-beam transcript she had brought up for Frasser would be an instruction from Shigemitsu and the other leaders back on earth about the new policy of cooperating with the psychs.

Without any sense of eavesdropping,

and because she had always been treated as one of the leaders of the group, Greta dropped the spool into the player. It gave the series of code clicks that indicated a closed-beam transmission which could be heard on just this one single player out of all those in the universe, and then Shigemitsu's voice came out, with that tiny suggestion of hissing accent that no one of Japanese ancestry ever quite lost:

"Your news is the best you could possibly send, and renders the success of our project practically certain if properly followed up. Of course, you will have perceived already that it is necessary to obtain the details of this new teflon process either from Rizzi or Harkavy before they can use it for a trip to Niflheim. The others are agreed with me that you are to stop at nothing, even primitive means, in obtaining it. Even if interstellar travel is restored on the fullest basis, our group cannot fail to be placed in charge of it, and this will permit us to have a majority in any council at any time. I do not think it will even be necessary to unseat the present council by a vote on the new marriage regulation; drop further efforts to persuade voting members along that line. I am glad you used your influence to obtain a special travel authorization for the girl. Her usefulness there is ended, and she is so emotional that she might cause trouble. We will have to dispose of her somehow when the program for the exclusion from the scientific rolls but that can be settled in due course. Remember that Rizzi is not dangerous in himself; it is Harkavy you must watch and work through."

AS THE message clicked off, Greta sat perfectly still, gripped by a kind of numb, cold horror. This was the result of her effort to make the world—the worlds—better places for people to live in. She was a puppet, a spy for a gang even more cynical than the advanced group headed by her father. At least the advanced group had ideals of a certain kind, even if she thought they were

wrong, but Shigemitsu and his crew were after nothing but personal power, just as in the primitive period. There was no one, no one, she could trust. Of what use all the scientific advances man had made through centuries if they only led back, by another route, to the same cold struggle for power? Lajos had been right, and the result of careful breeding for intellectual attainment and emotional stability under the Eugenics Committees had turned most scientists into automata, whose only emotional satisfaction lay in making other people do as they wished.

The door opened and Paul Frasser came in, pulling open the fastenings of his cold-suit. "Hello," he said, without apologizing for keeping her waiting. "Did you find it?"

Greta said, "There's a closed-beam urgent for you on the player from Shigemitsu. He says you're to get Harkavy's teflon process at any cost, and to ship me home because I'm not useful here any more."

The tone she used made Frasser give her a sharp look. "Closed beam is supposed to insure the privacy of communications," he said.

"If you're going to have spies, you must expect them to spy on you, too. Especially when you cheat them," she replied, anger and despair mingling in her voice.

"Oh, come," he said, "this business of cheating is becoming what the psychs call a fixation with you. Look at matters rationally."

"I am. I have. And what I see is that you're no more interested in people as a whole than my father. You and your gang just wanted my help to get in control of interstellar communication—and then I'm not useful any more."

Frasser shrugged. "Somebody has to control it."

"Why not the councils of all the sciences, the way it's supposed to be done?"

"Somebody has to control them, too. To decide which line of scientific endea-

vor will yield the greatest benefit to humanity."

Greta said fiercely, "Yes, I've heard that before. Well, I'm through. When I get back to earth, I'll have nothing more to do with your 'movement.' No, wait, I will too. I'll denounce it in open Council or the convention of the Association."

"I think not."

"What will prevent me?"

"Your own rational view of the consequences. Stop and think about it logically and scientifically. You'll be accusing part of the Council and a good many members of the association of conduct inimical to the advancement of science. Do you think they'd rather listen to you or order you for examination as emotionally unstable? They wouldn't dare let the political power have such a chance to upset the system of scientific regulations."

HE WAS right, Greta realized as her first flush of anger began to cool, and she remembered the years of struggle it had taken to set science free from the control of the old political governments, in which not the most intelligent, but the most cunning came to the top—with their wars and jealousies and eugenically bad strains breeding unchecked. She said, "My father—"

Frasser cut her off with a laugh. "If he doesn't know all about it already, he's more of a fool than I think. The only trouble is that he can't identify the people mainly responsible. You know that. Try talking to him, and you'll find yourself on a transport for Freya as the first victim of his purge."

Greta dropped her head a little. "I just wish there was someone I could trust," she said slowly, and groped her way to the door.

Paul Frasser watched her go with something that was not quite a sneer on his face. He was about to put Shigemitsu's message through the player when something struck him, and he stepped rapidly across the room to the

phone. "Hello," he told the hotel switchboard, "I want Derek Hyde, 316-422 on visual. Closed circuit."

There was a momentary wait before Hyde's head appeared on the plate, his hair tousled with sleep. "Hello, Hyde," said Frasser. "Nobody with you? Good. I know it's late and you love your rest, but this is an emergency. Remember that Manning girl, the good looking one we took to see Roselle La Blanche? She's been working with us, but I'm afraid we're going to have trouble, and it's got to be headed off. I sent her over to locate something at Harkavy's quarters. Don't know whether she found it or not, but she's just been here in a mood that makes me pretty certain she's going to turn sour."

Hyde had a finely chiseled face of the type that would have been called "aristocratic" in the old days. "What do you want me to do?" he asked. "Look her up and make love to her?"

"Stop being a fool and listen. There's just one danger, and that is that she'll go to Harkavy. I want you to get in touch with that building officer at his quarters, the one who gave you the tips-offs before, and have him notify you at once if she turns up there again. If she does, neither one of them must go out of the place alive and conscious."

Derek Hyde's aristocratic features appeared to be undergoing a revolution. The lines from nose to mouth pinched in and the eyebrows went up in the center. "But that's physical violence!" he squealed. "That's anti-social conduct! They'll psych me! They'll take away my mind!"

"Listen, you're playing in fast company now, up with the low intelligence number people. You do what I say, or something a lot worse than a psych will happen to you. I don't care how you arrange it, and I don't want to know, but that girl knows too much for the good of either of us, and she mustn't get it to Harkavy. Now move, before the roof falls in."

He snapped off the connection and

turned frowningly to listen to Shigemitsu's message.

XI

THE speaker said, "This is Greta Manning. May I come in?" Lajos Harkavy turned over in bed, snapped back the covers with one motion, dropped a night-suit around him with another, snapped the back-switch, said "Come," and stepped around the partition to meet her as the door of the reception-room slid back and its lights came on.

The hood of her cold-suit was back, but she had not taken it off; at the expression on her face, he checked any intention to make a light remark and motioned her to a seat. He said, "I'd like to spare you any embarrassment, but I'm afraid that as you came to see me, you'll have to speak first."

"All right," she said. Her voice was nearly toneless. "I had to come and tell you. I couldn't feel honest otherwise."

Lajos didn't sit down or say anything.

"You're not making it easy," she said.

"I beg your pardon." He stepped to the back of the room, turned a button and the place was filled with the faint scent of the pine mountains of earth. "It's not an emotional spray," he said, "merely a relaxer," and crossed to sit down opposite her. "Have you seen Malya?"

"No. Yes. I came for something else." The spray was already taking effect, and she felt better. "I just wanted to let you know that when I took the job of—spying on you, I didn't have any idea of what was really going on."

"How do you mean?"

The girl made a gesture with one hand. "I wonder if you understand. I think you probably do, even if you won't say so. The reason I wanted to help the—the moderates was because my father's group wanted to make the pure scientists—oh, you know, a privileged caste, and I didn't like it, even if I do rate as a pure scientist."

"I know. We talked about that back on earth. In the park beside the Hudson."

"And you told me that interstellar travel was going to end very soon."

"Yes," said Harkavy, "I told you that. I told it to you deliberately, and it wasn't quite true, because I thought you were in the clear and I didn't want to see you get mixed up in the fight. There isn't much mercy for anyone in it. Actually, there will be enough beryllium for a small amount of space travel for them foreseeable future. But the people who control it are going to control all the worlds. They can always send enough of their own group in to win a vote in the Council."

Greta said; "That's what I wanted to tell you. The moderates are as bad as the advanced group. All they want is to control. They want to put the rest of us down to tech status. And Paul Frasser's one of them."

"I know it."

"And send anyone who stands against them to some place like Freya."

"I know that, too."

"All right, did you know Toijiru Shigemitsu was one of them, too?"

Lajos changed his position. "No, I didn't. He has always behaved publicly like a real moderate, not a member of the group. Thank you."

"All right," said Greta, "now let me ask you a question. Are you and Rizzi planning a trip to Niflheim for beryllium? Because that's what Shigemitsu thinks, and he's going to do anything he possibly can to prevent it."

Lajos stood up and walked across the floor, his forehead set in a frown. "If I could be sure . . ."

"Of me? If I could be sure of you. How do I know that what you told Ingelhide was just to impress me? Just as when you told me that interstellar travel was going to stop completely, only it isn't."

"We don't seem to be getting anywhere—"

The red light beside the door flashed.

Lajos stepped over to it and switched the button to the "In" position, and the voice said; "Urgent. Package delivery."

AT THE sound of the click Lajos opened the delivery box in the wall to reveal a small container in dark plastic. "I wonder what that could be," he said, and pressed the opening slit. The box split; out on the table leaped a bright-colored something like a many-hearted jewel which turned and twisted urgently. In a flash Greta leaped from her seat, dashed it to the floor and stamped on it, while Lajos stood looking at where it had been with slack face and a foolish smile. Greta slapped him, hard. "Come out of it!" she said.

Lajos put one hand slowly up to his cheek, then turned to her, blinking. "What happened?" he said. "What was it?"

"A topological knot. They're hypnotic unless you know enough about pure mathematics to keep from being caught by them." She lifted her foot. "I think it's safe for you to look at it now, though. It wasn't made of very good material, and I've bent it out of shape. They use them as tests in higher mathematical training."

Lajos gazed at the object curiously, but did not attempt to pick it up. "It occurs to me," he said, "that you could just as easily have let me be hypnotized by that thing. I'd have done almost anything you told me, wouldn't I?"

"Yea."

HE GRINNED wryly. "In any case, I'll have to trust you to a certain extent. Sending that thing here means that someone is disturbed enough about what I'm doing to be willing to take a chance on having his mind wiped out for anti-social behavior. It also means there'll be a follow-up, and whoever it is will be plenty dangerous."

"I think I know who it is," said Greta. Frasser. Shigemitsu told him to stop at nothing to get your transparent teflon. I told him about it."

"I—"

The voice plate, in firm tones, said; "This is a Regulator Tech. Lajos Harkavy, you are to open the door at once."

"He thinks he's got you under," whispered the girl.

There was a silence from outside which seemed to prolong itself unbearably. Harkavy suddenly bounced through the side door into the studio, and was as rapidly back with the painting case and began unsnapping it just as the voice plate ejaculated; "Lajos Harkavy, I shall be forced to violate your privacy unless you admit me at once."

"Here," he said, thrusting the queer-looking weapon he had used in the Mac-Murray Forest into the girl's hands. "You work it with this lever. Hold him off if he gets in. I'm going to call for help—if they haven't cut the circuit."

The crack of an impulse-whip sounded against the door panel and a six-inch bulge appeared in it, as Harkavy bounded into the studio again. *Wham!* The budge widened and a crack ran across it. *Slam!* The crack became a gap through which a red glow showed as the next charge crashed into the door, splitting it right across. Greta crowded back toward the studio door to avoid the shock of the next one. *Wham-bang-o!* It sent the fragments of the door flying, and part of the charge tore into a chair across the reception room.

Into the gap stepped Derek Hyde, the impulse-whip under his arm.

"Where's Harkavy?" he demanded.

"Right here," Greta felt him beside her. "But you needn't worry about me. That weapon the young lady has is loaded with enough hydrofluoric acid to burn a hole right through you."

"I'll take my chance on that," said Hyde and raised the whip.

"Let him have it!" cried Harkavy.

"It's violence! I can't!" moaned the girl, and collapsed as Harkavy threw her to the floor, tumbling across her to avoid the charge that spurted into the studio and tore something from the wall with a crash.

Harkavy caught just a glimpse as the impulse-whip was lowered to finish them . . . and something hit Hyde from behind. The machine dropped from under his arm and an expression of the most intense surprise came across his face as he stood stock-still, utterly frozen, weapon under arm, finger on trigger. The next moment the place was swarming with half a dozen Regulator Techs, paralyzers in hand, and with Marius Rizzi frowning through the group.

ONE of the Regulators said; "Get that impulse-whip, Laurie. This is about the worst case of violence I've ever seen, and I think we better take him along without releasing anything but the legs."

Rizzi helped Greta up as one of the Regulators ran the release mechanism over Hyde's legs and shepherded him clumsily toward the elevator. Harkavy said; "Marius, you were certainly the god from the machine. I was trying to phone you when that maniac started breaking in, but I couldn't reach you. What in the nine worlds persuaded you to show up just at this time, and with a bodyguard."

Rizzi said; "Our little friend—" and then stopped and looked at Greta.

"It's all right," said Harkavy. "She's on our side."

Rizzi flushed a frown, but went on; "Our little friend Roselle—"

"Roselle!" cried Greta.

"Roselle la Blanche is one of our very best agents," said Harkavy, calmly.

"Lajos! Did you know it was because of her that I broke the acquaintance? They told me you had a connection with her."

"I do, but not the kind they meant. Go on, Marius, this sounds important."

"Our friend Roselle called and said Hyde had called her in a state of considerable excitement. He said he was being forced into an act of violence, and if he didn't come through, he wanted her to have his belongings. Well, the act of violence had to be against one of us, and

as you had been watched and I hadn't, I got busy with a friend of mine in the Regulator office and came over here."

Harkavy said; "Let's go into the living room away from that wreck of a door and work this out. I don't like the implications."

He led the way through to the seats in front of the fireplace, seated himself and said; "This is Frasser's crowd; the moderates. Greta was working for them until she found out what they were really up to, and she tells me they know about your transparent teflon. That must be what they're after."

"I told them about it," said Greta. "And then a closed beam came through from Shigemitsu on earth, telling Frasser not to stop at anything."

"I don't think he needed the encouragement," said Harkavy. "However, the question is what happens next. I don't think we can really pin anything on Frasser over this irruption of Hyde's. He'll have the guy pre-conditioned not to break under questioning, and even if he does, Frasser can always claim he exceeded instructions. And Frasser isn't the only man the moderates have on Uller. I'd rather let him alone and watch him than have them transfer the executive to someone we don't know about yet."

"May I speak?" said Greta. "There's a point that occurs to me. When they sent me here, that night, it was to find your laboratory and either have you up for unauthorized research or get the teflon process for themselves. Now Hyde comes in here and tries to blow you apart. It seems to me that this represents a change in emphasis from wishing to use the stuff themselves to preventing you from using it, and that's something you'll have to take into account."

"I believe you're right," said Rizzi. "And that means we'll have to work fast, before they or the advanced group can put a crimp in us from the Central Council. We only have two of the suits ready, but I think that gives us

enough to just make it, if—" "If what?" asked Greta.

"If we can get the travel authorization and the reaction car."

"You don't have to have it if you'll take me with you," said Greta. "I have a special authorization that was given to me when I broke the acquaintance."

"I don't know that I care for that idea," began Harkavy, but Rizzi put out a hand. "I'm in favor of it. The fact that the moderates are onto our plan means that we wouldn't have much chance of getting away with a big ship and a heavy load in any case. A reaction car will just hold three, one to handle the machine and two to work outside, and all we need is a sample of the stuff, not a cargo. Also, I have my pilot's license. But there are problems."

"Such as?" said Greta.

"We'll have to line the air-lock of the car with teflon and arrange a pressure-gear to clear it of fluorine after use. That isn't difficult in a technical sense with the new process, and it won't take long, but the minute we start work, we're advertising where we're going, and I'm afraid Frasser will use the opportunity to pull something on us."

XII

MASCARIADES was the name of the captain of the port, and by ancestry he was a Greek. At the present moment he looked acutely unhappy, although his control tower had been run up to afford an exceptionally fine view of the port and the weather was, for Uller, uncommonly pleasant.

"I am very sorry," he said, "but in view of the complaint that you are about to make a journey to a point other than that covered by your papers, I cannot give you a clearance or furnish you with fuel."

"Who made the complaint?" asked Greta.

"Don't waste time," said Rizzi. "We know who made it. I'm the pilot of record, Mr. Mascariades, and therefore

the ship's captain. What evidence is there to support the complaint?"

"The fact that you have altered the air-lock of the car to resist a non-terrestrial type atmosphere."

"You know an awful lot, don't you?" said Rizzi. "I think—"

"Wait a minute," said Harkavy. "That's not the way to handle this, Marius. Mr. Mascariades, will you get us a phone connection with the Council executive office? On visual."

"Certainly," said the captain, his relief showing in his voice, and turned to the instrument. In a moment a squarish face appeared on the screen, and a voice said; "Council Executive; Toller speaking."

"Mr. Toller," said Harkavy. "I am one of the passengers on reaction car VAK-321, authorized journey for Miss Greta Manning. We have just been refused clearance on the ground that our papers do not show the correct destination. I beg to submit that the destination is Earth, as stated, but we intend to make a stop-over at Nifsheim."

The square face showed no sign of relaxing. "The Uller Council has already been apprised of that fact. It cannot authorize a clearance for Nifsheim."

"Why not?"

"Because valuable equipment belonging to the Association will not be allowed to enter so corrosive an atmosphere."

"We have protected the airlock of the car. Exterior protection is unnecessary."

"Your unsupported statement is insufficient. The council has considered this question in view of information reaching it, and has decided that an analysis of the protective coating will be required."

Harkavy said; "That should be simple—" but Rizzi put a hand on his arm. "Just a moment," he said. "May we call back?"

"Certainly," said Toller, and the connection was abruptly broken.

Rizzi plucked at Harkavy's arm, pulling him a little aside. "It won't do," he

said. "Frasser is a perfectly competent physical chemist. With an analysis of our transparent teflon he could duplicate it just about as fast as he could set up the apparatus."

"I see. And then he'd keep us here on some other pretext while he made the Nifheim exploration a general Association project with himself at the head of it. Very neat." Harkavy turned; "Mr. Mascariades, will you excuse us for a moment? We need to confer in view of the situation."

"Gladly," said the port captain. "You can use my inner office there. It is sound-proofed and has no spy ray—unless someone has installed one recently." He took on an anxious look. "Believe me, Mr. Harkavy, we techs will do anything permitted by the regulations to help you out."

WHEN they were in the office with Rizzi perched on a desk and the other two in the seats, Harkavy said; "Maybe you can suggest something, Greta. The way this thing is rigged, Frasser can get the transparent teflon process by an analysis. We should have lined that air-lock with opaque, but it's a little late to think of that now, and besides it would make the controls hard to get at."

The girl said; "Wouldn't the logical thing be to appeal from the Council to the general body of the Uller Association? There ought to be enough psychs and fair-minded applied scientists in it to give you a majority."

"There are two reasons why that won't work out," said Harkavy. "One is that we aren't exactly coming to court with clean hands after trying to slip away, so we couldn't be sure of holding the majority in line for a special, unauthorized project. The other is even more so; Frasser and his merry companions would appeal to Central Council back on earth, and either the advanced group would demand the new marriage regulation as the price of letting it go through, or they'd make it a Central

Council project. What we have to do is get there first and make the demonstration ourselves. It's the only way Marius and I can get enough promotion and backing. He'll have to take over if I can't be declared adult and take my place in the rankings."

Greta had been frowning. Now she said; "Would it help if it could be proved that the lining would stand Nifheim's atmosphere *without* making a chemical analysis?"

"It would help an awful lot," said Rizzi. "Even the moderates would find it hard to think up another objection in time. As I understand the captain out there, all we have to furnish is proof, it doesn't matter what kind. If it can be done."

"I think it can," she said, and stood up. "I want a spectroscopic light projector and a recorder for it. Also an electron microscope scalped in angstroms. And samples of fluorine and hydrofluoric acid."

"Those you can have," said Rizzi, "and the executive will have to send inspectors if you're going to make a test. But you'll probably get Frasser along with them."

They did; accompanied by techs bearing the equipment and a pair of representatives from the Council executive, one of them the square-faced Toller, the other a melancholy looking man bearing the name of Seneff. Frasser greeted the others with the calm courtesy demanded of scientists in the presence of the lower ratings, and it was not until they stood before the opened door of the air-lock with Greta adjusting the projector to play on it that he said; "What do you propose to do?"

"I don't know that I care to tell you," said Greta. "Do you have official status to ask?" She turned to one of the techs. "I want the microscope set in phase to catch the reflection from the metal surface under the coating, and the recorder to pick up the result. Can you do that?"

"Miss Manning." It was Toller. "I have the official status to ask, and I do

STARTLING STORIES

ask what you propose to do." Behind him Harkavy and Rizzi exchanged glances.

"Very well. I propose to demonstrate mathematically that this coating is impervious to the conditions on Nifsheim."

Frasser said; "Gentlemen, I submit that this is absurd. A simple chemical analysis—"

"Would prove that the coating is impervious to fluorine under the conditions on Uller, not on Nifsheim. Chemistry isn't my branch, but I do know you can't reproduce the Nifsheim conditions in a laboratory. They're too complex."

"I don't think mathematical proof would be acceptable."

The melancholy Senef spoke for the first time. "The Council's regulation asked for proof but did not specify the nature of it. You have given us a good deal of trouble already, Mr. Frasser, and I am afraid you will have to be bound by our decision." Once more Harkavy and Rizzi exchanged glances.

"All right," said Greta to one of the techs. "Cut in the power. No, that's not quite right. There's a fadeout toward the UV. Can you get that set? There; it looks as though it's coming through correctly now. Record, and then move the projector slowly along."

GRETA tripped the holder and the record came out, a long band bearing a series of waving intricate curves. "Now will you run light tests on those samples of fluorine and hydrofluoric, and bring the records to me in the control tower, while I analyze this one?"

She led the way across the field past the firing pits to the control. When the group had gathered around the table in Mascariades' office, she spread the record of the light test out.

"Now, gentlemen," she said, "these curves represent the passage of light of different wave-lengths through the lining material. It went through twice, but that needn't concern us. Notice that it isn't a straight line, as you might expect, but a wavy curve; the different

wave-lengths of light encountered varying resistances from the molecules of the material."

"The phenomenon is a familiar one," observed Toller.

"I know," said Greta. "Now as far as a mathematician is concerned a wave is not a picture of something; it's a graphic method of expressing a periodic function. I'm going to reverse the process here and derive the function from the graph. The grid in the record will give us our coordinates. Have you got a hand calculator and a sheet of paper?"

She wrote rapidly as the figures ticked in the calculator, then turned to the two Council executives. "Observe that this function has a variable in it, due to the molecules of the lining being affected differently by light of different wave-lengths; and that as it progresses evenly where the record runs out into the infrared and UV at the two ends, it is probably an infinite series. Since that is the case, the values of the variable, z , can only be described by a Weierstrass analytic power series."

Toller turned to Senef; "Is that correct? In astronomy we don't deal in this sort of thing."

Senef said; "It's correct enough; almost elementary. But I don't see what you expect to prove by it, Miss Manning. The series is convergent."

"You will in a minute," said the girl. "Ah, here's the record on those other two tests now. Let's take the fluorine one first. The one for the acid is just a check." Again she wrote and the calculator clicked. She handed the result to Senef. "Will you glance that over and see if it isn't correct? I want you to notice that it's another convergent series. That is, it approaches a finite number."

Senef's melancholy features took on a touch of glee. "I think I see what you're driving at. Yes."

"But if we combine the two," said Greta, and wrote again, "the result is a new series, and as you will see, it's divergent. It reaches to infinity; that is,

the only point at which a combination of fluorine and the lining material could take place would be infinity."

Seneff patted his hands together softly. "Admirable!" he said. "Thoroughly convincing. Toller, this is the proof we asked for. We probably should have known better than to doubt people of this order of intelligence."

"If you're satisfied—" began Toller.

"I'm not," said Paul Frasser.

Seneff faced him. "I do not know that your opinions are a factor. Captain Mascarades, you may give this car an immediate clearance and a supply of fuel adequate for reaching Earth with a stop-over at Nilfheim."

XIII

THE meeting is open," announced President Manning, and the twenty-two members of the Central Council of the Association for the Advancement of Science stopped their low buzz of conversation and settled back.

"We still have pending the matter of the new marriage regulation," Manning said. "In the interests of—"

Old Henrik Kool raised his hand and said; "Floor."

"Pending business should be disposed of first."

Kool said; "I appeal from the decision of the chair. I have new business of such urgency that until it is disposed of we cannot deal properly with the pending business, and indeed the attitude of this body toward it may be altered by a change in the Council's composition."

"Please record ballots on the appeal," said Manning, and turned to face the voting board where the balloting done by keys in the arms of the seats was automatically recorded. "Two first rate scientists in favor of the appeal, six votes; two second rate, four votes; nine third rate, nine votes; total nineteen out of thirty-five. The appeal is supported. Mr. Kool, state your new business."

"I wish to present Lajos Harkavy,

BC-11-71, who has succeeded in reaching Nilfheim and returning with proof that it contains ample supplies of beryllium to last the whole system for many hundreds of years of unrestricted interstellar travel, and that it can be handled safely."

"Is there any confirmation of the facts?" asked Manning, as calmly as though he did not know what was coming.

A man near the middle of the room raised his hand. "The chemical section confirms," he said. "Not only was a quantity of high-grade beryllium ore brought back, but also optical crystals of calcium fluoride of high indicated value."

"You may present," said Manning.

Kool stepped to the door and admitted Harkavy, Greta and Rizzi, leading them to seats at the front of the council room. When they were seated he faced the group. "In view of the achievement of Lajos Harkavy, I ask a seat on this Council for him, with the rank of first rate scientist; and I ask a seat for Marius Rizzi, his assistant, with the rank of third rate scientist."

A woman with dark hair, one of Manning's advanced group, claimed the floor and said; "Objection. If Rizzi made the discoveries, he should be promoted, but not Harkavy."

Kool said; "Mr. Rizzi, will you tell us about it."

Rizzi stood up. "The process by which protective plating for use in a fluorine atmosphere was developed was entirely due to Harkavy. I furnished only the laboratory and technical assistance."

The objector remained on her feet. "Unauthorized research!"

Harkavy spoke for the first time. "The research was done on Uller. That's why I went there. It's an outer, class C planet, and no authorization is required, provided only local materials are used."

The woman sat down, but another man raised his hand. "I have an objection as a member of the Eugenics Committee. According to our records, Mr. Harkavy is not an adult, and therefore

cannot have either the rating you ask or a seat on this Council."

"I will move a regulation by this body to declare him adult," said Kool. "In view of attainments beyond those of anyone here, it is deserved."

The objector looked at a note and clung to his point. "According to the records, Mr. Harkavy lacks two years of the required age. If we are to make special regulations in individual cases, we might as well not have any regulations at all. It is hopelessly unscientific. Science admits of no exceptions."

Harkavy stood up. "May I speak? I could name a few exceptions science admits, and I can name one in the regulations. When a person of my age has made a marriage authorized by the Eugenics Committee, he is assumed to be

stable enough to be declared adult."

"But you're not married. You're not even on acquaintance."

"Oh, yes I am. Ask Marius Rizzi if you wish."

Rizzi said; "As captain of a ship in deep space, I was authorized to perform marriages, even when not authorized. Of course, there were only three of us aboard, and it wasn't much of a ceremony, but when they asked me, I could not very well refuse—could I?"

In the applause and murmurs that ran through the group it was a couple of minutes before Henrik Kool could get enough attention to say: "In the light of the evidence before us, I do not think there can be any objection to voting the regulations I have asked."

There was not.



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THE SILICONE WORLD

ON THE following pages are reproduced the author's notes on THE LONG VIEW. We are presenting them in article form not only because they supply to the interested reader an absorbing technical background to the novel, but because they form a revealing picture of the wheels and gears that click and whir in a sci author's mind when he really sets out to do a job—the exhaustive research and planning which he will undertake in order that the completed work will be solid as a rock. Fletcher Pratt speaking—



THE planet is named Uller (it seems that in interstellar travel the names of Norse gods, instead of Greek, were applied to the few habitable worlds). It is the second planet of the star Beta Hydri, right angle 0.23, declension -77:32; GO (solar) type star, of approximately the same size as the sun; distance from earth 21 light years.

Uller revolves around Beta Hydri in a nearly circular orbit, at a distance of 105,000,000 miles, making it a little colder than earth. A year is of the approximate length of that on earth. A day lasts 26 hours.

The axis of Uller is in the same plane as the orbit, so that at a certain time of the year the north pole is pointed directly at the sun, while at the opposite end of the orbit, it points directly away. The result is highly exaggerated seasons. At the poles the temperature runs from 120° C. to a low of -80° C. At the equator it remains not far from plus 10° C. all year round. Strong winds during the summer and winter, from the hot to the cold pole. Few winds during the spring and fall. The appearance of the poles varies during the year from baked deserts to glaciers covered with solid CO₂. Free water exists in the equatorial regions all year round.

2. SOLAR MOVEMENT AS SEEN FROM ULLER.

As seen from the north pole—no sun visible on Jan. 1. On April 1, it bisects the horizon all day, swinging completely around. April 1 to July 1, it continues swinging around, gradually rising in the sky, the spiral converging to its center at the zenith, which it reaches on July 1. From July to October 1 the spiral starts again, spreading out from the center until on October 1 it bisects the horizon again. On October 1 night arrives again and stays until April 1.

At the equator, the sun is visible bisecting the southern horizon for all 26 hours of the day on January 1. From January 1 to April 1 the sun starts to dip below the horizon at night, to rise higher above it during the day. During all this time it rises and sets at the same hours, but rises in the southeast and sets in the southwest. At noon it is higher each day in the southern sky, until April 1, when it rises due east, passes through the zenith and sets due east. From April 1 to July 1, its noon position drops down to the north until on July 1, it is visible all day, bisected by the northern horizon.

3. CHEMISTRY AND GEOLOGY OF ULLER.

Calcium and chlorine are rarer than on earth; sodium is somewhat common-

er. As a result of the shortage of calcium there is a higher ratio of silicates to carbonates than exists on earth. The water is slightly alkaline, and resembles a very dilute solution of sodium silicate (water glass). It would have a pH of 8.5 and would taste slightly soapy. Also, when it dries out it leaves a sticky, and then a glassy, crackly film. Rocks look fairly earthlike, but the absence or scarcity of anything like limestone is noticeable. Practically all the sedimentary rocks are of the sandstone type.

4. ANIMAL LIFE.

Life developed as it did on earth, in the permanent waters, but because of the abundance of silicon, there was a strong tendency for the microscopic organisms to develop silicate exoskeletons, like diatoms. The present invertebrate animal life of the plant is of this type and is confined to the equatorial seas. They run from amoeba-like objects to things like crayfish, with silicate skeletons. Later, some species of these started taking the silicon into their soft tissues, and eventually their carbon-chain compounds were converted to silicone

type chains, from - C - C - C - C - to

O - Si - O - Si - O - Si with organic radi-

eals on the side links. These organisms were a transitional type, with silicone tissues and water body fluids, resembling the earthly amphibians, and are now practically extinct. There are a few species, something like segmented worms, still to be seen in backwaters of the central seas.

A further development occurred when the silicone-chain animals began to get short-chain silicones into their circulatory systems, held in solution by OH or NH₂ groups on the ends and branches of the chains. The proportion of these compounds gradually increased until the water was a minor and then a missing

constituent. The larger mobile species, then, were practically anhydrous. Their blood consists of short-chain silicones, with quartz reinforcing, and their armor, teeth, etc., of pure amorphous quartz (opal). Most of these parts are of the milky variety, variously tinted with metallic impurities, as are the varieties of sapphires.

These pure silicone animals, due to their practical indestructibility, annihilated all but the smaller of the carbon animals, and drove the compromise types into odd corners as relics. They developed into a fish-like animal—with a very large swim-bladder to compensate for the rather higher density of the silicone tissues—and from these fish the land animals developed. Due to their high density and resulting high weight, they tend to be low to the ground, rather reptilian in look. Three pairs of legs are usual in order to distribute the heavy load. There is no sharp dividing line between the quartz armor and the silicone tissue. One merges into the other.

The dominant pure silicone animals only could become mobile and venture far from the temperate equatorial regions of Uller, for they alone were independent of the planet's violent climate, since they neither froze nor stiffened with cold, nor boiled off when it got really hot. Note that all animal life on this planet is cold-blooded, with a negligible difference between body and ambient temperatures. Since the animals are silicones, they don't get sluggish, like cold snakes.

5. PLANT LIFE.

The plants are of the carbon metabolism-silicate shell type, like the primitive animals. They spread out from the equator as far as they could go before the baking polar summers killed them. They had normal seasonal growth in the temperate zones, and remained dormant and frozen solid during the winter. At the poles there is no vegetation—not because of the cold winters, but because

of the hot summers. The cold winter winds frequently blow over dead trees and roll them as far as the equatorial seas. Other dead vegetation, because of the highly silicious water, always gets petrified, like the petrified forest, unless it gets eaten first. What with the quartz-speckled hides of the living vegetation, and the solid quartz of the dead, a forest is spectacular.

The silicone animals live on the plants. They chomp them up, dehydrate them, and convert their silicious outer bark and carbonaceous interiors into silicones for themselves. When silicone tissue is metabolized, the carbon and hydrogen go to CO_2 and H_2O , which are breathed out, while the Silicon goes into SiO_2 , which is deposited as more teeth and armor. (Compare the terrestrial octopus, which makes armor plating out of calcium urate instead of excreting urea or uric acid.) The animals can, of course, eat each other, too, or try to make a meal of the small carbonaceous animals of the equatorial seas.

Further note that the animals cannot digest plants when they are cold. They can eat them and store them, but the disposal of the solid water and CO_2 is too difficult a problem. When they warm up, the water in the plants melts and can be disposed of, and things are simpler.

All rivers are seasonal, running from the polar regions to the central seas in the spring only, or until the polar cap is completely dried out.

The Fluorine Planet

The planet named Nifheim is the fourth planet of Nu Puppis, right angle 6:36, declension -43:09; B8 type star, blue-white and hot, 148 light years distant from the earth, which will require a speed in excess of light to reach it.

Nifheim is 462,000,000 miles from its primary, a little less than the distance of Jupiter from our sun. It thus does not receive too great a total amount of energy, but what it does receive is of

high potential, a large fraction of it being in the ultra-violet and higher frequencies. (Watch out for really super-special sunburn, etc., on unwarned personnel.)

The gravity of Nifheim is approximately 1 g, the atmospheric pressure approximately 1 atmosphere, and the average ambient temperature about -60° C; -70° F.

2. ATMOSPHERE.

The oxidizer in the atmosphere is free fluorine (F_2) in a rather low concentration, about 4 or 5 per cent. With it appears a mad collection of gases. There are a few inert diluants, such as N_2 (nitrogen), argon, helium, neon, &c., but the major fraction consists of CF_4 (carbon tetrafluoride), BF_3 ("boron trifluoride"), SiF_4 (Silicon tetrafluoride), PF_5 (phosphorous pentafluoride), SF_6 (sulphur hexafluoride) and probably others. In other words, the fluorides of all the non-metals that can form fluorides. The phosphorous pentafluoride rains out when the weather gets cold. There is also free oxygen, but no chlorine. That would be liquid except in very hot weather. It sometimes appears combined with fluorine in chlorine trifluoride. The atmosphere, on examination, has a slight yellowish tinge.

3. SOIL AND GEOLOGY.

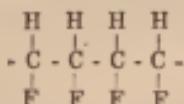
Above the metallic core of the planet, the lithosphere consists exclusively of fluorides of the metals. There are no oxides, sulfides, silicates or chlorides. There are small deposits of such things as bromine trifluoride, but these have no great importance. Since fluorides are weak mechanically, the terrain is flattish. Nothing tough like granite to build mountains out of. Since the fluoride ion is colorless, the color of the soil depends upon the predominant metal in the region. As most of the light metals also have colorless ions, the colored rocks are rather rare.

4. THE WATERS UNDER THE EARTH.

They consist of liquid hydrofluoric acid (HF). It melts at -83° C. and boils at 19.4° C. In it are dissolved varying quantities of metallic and non-metallic fluorides, such as boron trifluoride, sodium fluoride, etc. When the oceans and lakes freeze, they do so from the bottom up, so there is no layer of ice over free liquid.

5. PLANTS AND PLANT METABOLISM.

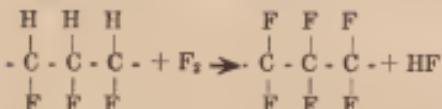
The plants function by photosynthesis, taking HF as water from the soil, and carbon tetrafluoride as the equivalent of carbon dioxide from the air to produce chain compounds, such as:



and at the same time liberating free fluorine. This reaction could only take place on a planet receiving lots of ultraviolet because so much energy is needed to break up carbon tetrafluoride and hydrofluoric acid. The plant catalyst (doubling for the magnesium in chlorophyl) is nickel. The plants are colored in various ways. They get their metals from the soil.

5. ANIMALS AND ANIMAL METABOLISM.

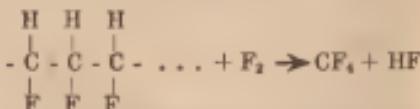
Animals depend upon two main reactions for their energy, and for the construction of their harder tissues. The soft tissues are about the same as the plant molecules, but the hard tissues are produced by the reaction:



resulting in a Teflon boned and shelled

organism. He's going to be tough to do much with. Diatoms leave strata of powdered teflon.

The main energy reaction that occurs among this type of life is expressed in the following formula:



The blood catalyst metal is titanium, which results in colorless arterial blood and violet venous, as the titanium flips back and forth between tri- and tetravalent states.

7. SOME EFFECTS ON INTRUDING ITEMS:

Water decomposes into oxygen and hydrofluoric acid. All organic matter (earth type) converts into oxygen, carbon tetrafluoride, hydrofluoric acid, etc., with more or less speed. A rubber gas mask lasts about an hour. Glass first frosts and then disappears. Plastics act like rubber, only a little slower. The heavy metals, iron, nickel, copper, monel, etc., stand up well, forming an insoluble coat of fluorides at first and then doing nothing else.

8. WHY GO THERE?

Of great interest, naturally, are the properties of the planet which we may employ.

Large natural crystals of fluorides, such as calcium difluoride, titanium tetrafluoride, zirconium tetrafluoride, are extremely useful in optical instruments of various forms. Uranium appears as uranium hexafluoride, all ready for the diffusion process. Compounds of such non-metals as boron are obtainable from the atmosphere in high purity with very little trouble. All metallurgy must be electrical.

There are considerable deposits of beryllium, and they occur in high concentration in its ores.

—Fletcher Pratt

Columbus had a surprise in store for him. . . .



Sail On! Sail On!

By PHILIP JOSÉ FARMER

FRIAR SPARKS sat wedged between the wall and the realizer. He was motionless except for his forefinger and his eyes. From time to time his finger tapped rapidly on the key upon the desk, and now and then his irises, grayblue as his native Irish sky, swiveled to look through the open door of the foldilla in which he crouched, the little shanty on

the poopdeck. Visibility was low.

Outside was dusk and a lantern by the railing. Two sailors leaned on it. Beyond them bobbed the bright lights and dark shapes of the Niña and the Pinta. And beyond them was the smooth horizon-brow of the Atlantic, edged in black and blood by the red dome of the rising moon.

The single carbon filament bulb above the monk's tonsure showed a face lost in fat—and in concentration.

The luminiferous ether crackled and hissed tonight, but the phones clamped over his ears carried, along with them, the steady dots and dashes sent by the operator at the Las Palmas station on the Grand Canary.

Zziss! So you are out of sherry already... Pop!... Too bad... Crackle... you hardened old winebutt... Zzz... May God have mercy on your sins...

Lots of gossip, news, etcetera... Hissez!... Bend your ear instead of your neck, impious one... The Turks are said to be gathering... crackle... an army to march on Austria. It is rumored that the flying sausages, said by so many to have been seen over the capitals of the Christian world, are of Turkish origin. The rumor goes they have been invented by a renegade Rogerian who was converted to the Muslim religion... I say... zziss... to that. No one of us would do that. It is a falsity spread by our enemies in the Church to discredit us. But many people believe that...

How close does the Admiral calculate he is to Cipangu now?

Flash! Savonarola today denounced the Pope, the wealthy of Florence, Greek art and literature, and the experiments of the disciples of St. Roger Bacon... Zzz!... The man is sincere but misguided and dangerous... I predict he'll end up on the stake he's always prescribing for us...

Pop... This will kill you... two Irish mercenaries by the name of Pat and Mike were walking down the street of Granada when a beautiful Saracen lady leaned out of a balcony and emptied a pot of... hiss!... and Pat looked up and...

Crackle... Good, hah? Brother Juan told that last night....

PV... PV... Are you coming in?... PV... PV... Yes, I know it's dangerous to bandy such jests about,

but nobody is monitoring us tonight... Zzz... I think they're not, anyway....

And so the ether bent and warped with their messages. And presently Friar Sparks tapped out the PV that ended their talk the pax vobiscum. Then he pulled the plug out that connected his earphones to the set and, lifting them from his ears, clamped them down forward over his temples in the regulation manner.

AFTER sidling bent-kneed from the *toldilla*, punishing his belly against the desk's hard edge as he did so, he walked over to the railing. De Salcedo and de Torres were leaning there and talking in low tones. The big bulb above gleamed on the page's redgold hair and on the interpreter's full black beard. It also bounced pinkishly off the priest's smoothshaven jowls and the light scarlet robe of the Rogerian Order. His cowl, thrown back, served as a bag for scratch-paper, pens, an ink bottle, tiny wrenches and screwdrivers, a book on cryptography, a slide rule, and a Manual of Angelic Principles.

"Well, old rind," said young de Salcedo familiarly, "what do you hear from Las Palmas?"

"Nothing now. Too much interference from that."

He pointed to the moon riding the horizon ahead of them.

"What an orb!" bellowed the priest. "It's as big and red as my revered nose!"

The two sailors laughed, and de Salcedo said, "But it will get smaller and paler as the night grows, Father. And your proboscis will, on the contrary, become larger and more sparkling in inverse proportion according to the square of the ascent—"

He stopped and grinned, for the monk had suddenly dipped his nose, like a porpoise diving into the sea, raised it again, like the same animal jumping from a wave, and then once more plunged it into the heavy currents of their breathe. Nose to nose, he faced them, his twinkling little eyes seeming

to emit sparks like the realizer in his *toldilla*.

Again, porpoise-like, he sniffed and snuffed several times, quite loudly. Then, satisfied with what he had gleaned from their breaths, he winked at them. He did not, however, mention his findings at once, preferring to sidle towards the subject.

He said, "This Father Sparks on the Grand Canary is so entertaining. He stimulates me with all sorts of philosophical notions, both valid and fantastic. For instance, tonight, just before we were cut off by that,"—he gestured at the huge bloodshot eye in the sky—"he was discussing what he called worlds of parallel time tracks, an idea originated by Dysphagius of Gotham."

"It's his idea there may be other worlds in coincident but not contacting universes, that God, being infinite and of unlimited creative talent and ability, the Master Alchemist, in other words, has possibly—perhaps necessarily—created a plurality of continua in which every probable event has happened."

"Huh?" grunted de Salcedo.

"Exactly. Thus, Columbus was turned down by Queen Isabella, so this attempt to reach the Indies across the Atlantic was never made. So we would not now be standing here plunging ever deeper into Oceanus in our three cockleshells, there would be no booster buoys strung out between us and the Canaries, and Father Sparks at Las Palmas and I on the Santa Maria would not be carrying on our fascinating conversations across the ether."

"Or, say, Roger Bacon was persecuted by the Church, instead of being encouraged and giving rise to the Order whose inventions have done so much to insure the monopoly of the Church on alchemy and its divinely inspired guidance of that formerly pagan and hellish practice."

De Torres opened his mouth, but the priest silenced him with a magnificent and imperious gesture and continued.

"Or, even more ridiculous, but thought

provoking, he speculated just this evening on universes with different physical laws. One, in particular, I thought very droll. As you probably don't know, Angelo Angelei has proved, by dropping objects from the Leaning Tower of Pisa, that different weights fall at different speeds.

"My delightful colleague on the Grand Canary is writing a satire which takes place in a universe where Aristotle is made out to be a liar, where all things drop with equal velocities, no matter what their size.

Silly stuff, but it helps to pass the time. We keep the ether busy without little angels."

De Salcedo said, "Uh, I don't want to seem too curious about the secrets of your holy and cryptic order, Friar Sparks. But these little angels your machine realizes intrigue me. Is it a sin to presume to ask about them?"

The monk's bull roar slid to a dove cooing.

"Whether it's a sin or not depends. Let me illustrate, young fellows. If you were concealing a bottle of, say, very scarce sherry on you, and you did not offer to share it with a very thirsty old gentleman, that would be a sin. A sin of omission.

"But if you were to give that desert-dry, that pilgrim-weary, that devout, humble, and decrepit old soul a long, soothing, refreshing, and stimulating draught of lifegiving fluid, daughter of the vine, I would find it in my heart to pray for you for that deed of loving-kindness, of encompassing charity. And it would please me so much I might tell you a little of our realizer. Not enough to hurt you, just enough so you might gain more respect for the intelligence and glory of my Order."

DE SALCEDO grinned conspiratorial-
ly and passed the monk the bottle he'd hidden under his jacket. As the friar tilted it, and the chug-chug-chug of vanishing sherry became louder, the two sailors glanced meaningfully at each

other. No wonder the priest, reputed to be so brilliant in his branch of the Alchemical Mysteries, had yet been sent off on this half-baked voyage to devil-knew-where. The Church had calculated that if he survived, well and good. If he didn't, then he would sin no more.

The monk wiped his lips on his sleeve, belched loudly as a horse, and said, "Gracias, boys. From my heart, so deeply buried in this fat, I thank you. An old Irishman, dry as a camel's hoof, choking to death with the dust of abstinence, thanks you. You have saved my life."

"Thank rather that magic nose of yours," replied de Salcedo. "Now, old rind, now that you're well greased again, would you mind explaining as much as you are allowed about that machine of yours?"

Friar Sparks took fifteen minutes. At the end of that time, his listeners asked a few permitted questions.

"... and you say you broadcast on a frequency of 1800 kc.?" the page asked. "What does kc. mean?"

"K stands for the French kilo, from a Greek word meaning thousand. And c stands for the Hebrew cherubim, the 'little angels.' Angel comes from the Greek *angelos*, meaning messenger. It is our concept that the ether is crammed with these cherubim, these little messengers. Thus, when we Friar Sparks depress the key of our machine, we are able to realize some of the infinity of 'messengers' waiting for just such a demand for service.

"So, 1800 kc. means that in a given unit of time 1,800,000 cherubim line up and hurl themselves across the ether: the nose of one being brushed by the feathertips of the cherub's wings ahead. The height of the wingcrests of each little creature are even, so that if you were to draw an outline of the whole train, there would be nothing to distinguish one cherub from the next, the whole column forming that grade of little angels known as C. W."

"C.W.?"

"Continuous wingheight. My machine is a C.W. realizer."

Young de Salcedo said, My mind reels. Such a concept! Such a revelation! It almost passes comprehension. Imagine, the aerial of your realizer is cut just so long, so that the evil cherubim surging back and forth on it demand a predetermined and equal number of good angels to combat them. And this seduction coil on the realizer crowds 'bad' angels into the left-hand, the sinister side. And when the bad little cherubim are crowded so closely and numerously that they can't bear each other's evil company, they jump the spark gap and speed around the wire to the 'good' plate.

"And in this racing back and forth they call themselves to the attention of the 'little messengers,' the yea-saying cherubim. And you, Friar Sparks, by manipulating your machine thus-and-so, and by lifting and lowering your key, you bring these invisible and friendly lines of carriers, your etheric and winged postmen, into reality. And you are able, thus, to communicate at great distances with your brothers of the Order."

"Great God!" said de Torres.

IT WAS not a vain oath but a pious exclamation of wonder. His eyes bulged; it was evident that he suddenly saw that man was not alone, that on every side, piled on top of each other, flanked on every angle, stood a host. Black and white, they presented a solid chessboard of the seemingly empty cosmos, black for the nay-sayers, white for the yea-sayers, maintained by a Hand in delicate balance and subject as the fowls of the air and the fish of the sea to exploitation by man.

Yet de Torres, having seen such a vision as has made a saint of many a man, could only ask, "Perhaps you could tell me how many angels may stand on the point of a pin?"

Obviously, de Torres would never wear a halo. He was destined, if he lived, to cover his bony head with the mortar-board of a university teacher.

De Salcedo snorted.

"I'll tell you. Philosophically speaking, you may put as many angels on a pin-head as you want to. Actually speaking, you may put only as many as there is room for."

"Enough of that. I'm interested in facts, not fancies. Tell me, how could the moon's rising interrupt your reception of the cherubim sent by the Sparks at Las Palmas?"

"Great Caesar, how would I know! Am I a repository of universal knowledge? No, not I! A humble and ignorant friar, I! All I can tell you is that last night it rose like a bloody tumor on the horizon, and that when it was up, I had to quit marshaling my little messengers in their short and long columns. The Canary station was quite overpowered, so that both of us gave up. And the same thing happened tonight."

"The moon sends messages?" asked de Torres.

Not in a code I can decipher. But it sends, yes."

"Santa Maria!"

"Perhaps," suggested de Salcedo, "there are people on that moon, and they are sending."

Friar Sparks blew derision through his nose. Enormous as were his nostrils, his derision was not small bore. Artillery of contempt laid down a barrage that would have silenced any but the strongest of souls.

"Maybe," de Torres spoke in a low tone, "maybe, if the stars are windows in heaven, as I've heard said, the angels of the higher hierarchy, the big ones, are realizing-uh-the smaller? And they only do it when the moon is up so we may know it is a celestial phenomenon?"

He crossed himself and looked around the vessel.

You need not fear," said the monk gently. "There is no Inquisitor leaning over your shoulder. Remember, I am the only priest on this expedition. Moreover, your conjecture has nothing to do with dogma."

"However, that's unimportant. Here's

what I don't understand. How can a heavenly body broadcast? Why does it have the same frequency as the one I'm restricted to? Why—?"

"I could explain," interrupted de Salcedo with all the brashness and impatience of youth. "I could say that the Admiral and the Rogerians are wrong about the earth's shape. I could say the earth is not round but is flat. I could say the horizon exists, not because we live upon a globe, but because the earth is curved only a little ways, like a greatly flattened out hemisphere."

"I could also say that the cherubim are coming, not from Luna, but from a ship such as ours, a vessel which is hanging in the void off the edge of the earth."

"What?" gasped the other two.

HAVEN'T you heard that the King of Portugal secretly sent out a ship after he turned down Columbus' proposal? How do we know he did not, that the messages are not from our predecessor, that he sailed off the world's rim and is now suspended in the air and becomes exposed at night because it follows the moon around Terra, is, in fact, a much smaller and unseen satellite?"

The monk's laughter woke many men on the ship. .

"I'll have to tell the Las Palmas operator your tale. He can put it in that novel of his. Next, you'll be telling me those messages are from one of those fire-shooting sausages so many credulous laymen have been seeing flying around. No, my dear de Salcedo, let's not be ridiculous. Even the ancient Greeks knew the earth was round. Every university in Europe teaches that. And we Rogerians have measured the circumference. We know for sure that the Indies lie just across the Atlantic. Just as we know for sure, through mathematics, that heavier-than-air machines are impossible. Our Friar Ripskulls, our mind-doctors, have assured us these flying creations are mass hallucinations or else the tricks of heretics or Turks who want to panic the populace."

"That moon radio is no delusion, I'll grant you. What it is, I don't know. But it's not a Spanish or Portuguese ship. What about its different code? Even if it came from Lisbon, that ship would still have a Rogerian operator. And he would, according to our policy, be of a different nationality than the crew so he might the easier stay out of political embroilments. He wouldn't break our laws by using a different code in order to communicate with Lisbon. We disciples of St. Roger do not stoop to petty boundary intrigues. Moreover, that realizer would not be powerful enough to reach Europe, and must, therefore, be directed at us."

De Torres shivered and crossed himself again.

"Perhaps the angels are warning us of approaching death? Perhaps?"

"Perhaps? Then why don't they use our code? Angels would know it as well as I. No, there is no perhaps. The Order does not permit perhaps. It experiments and finds out; nor does it pass judgment until it knows."

"I doubt we'll ever know," said de Salcedo gloomily. "Columbus has promised the crew that if we come across no sign of land by evening tomorrow, we shall turn back. Otherwise,"—he drew a finger across his throat—*kkk!* Another day, and we'll be pointed east and getting away from that evil and bloody-looking moon and its incomprehensible messages."

"It would be a great loss to the Order and to the Church," sighed the friar. "But I leave such things in the hands of God and inspect only what He hands me to look at."

With which pious statement Friar Sparks lifted the bottle to ascertain the liquid level. Having determined in a scientific manner its existence, he next measured its quantity and tested its quality by putting all of it in that best of all chemistry tubes—his enormous belly.

Afterwards, smacking his lips and ignoring the pained and disappointed looks

on the faces of the sailors, he went on to speak enthusiastically of the water-screw and the engine which turned it, both of which had been built recently at the St. Jonas College at Genoa. If Isabella's three ships had been equipped with those, he declared, they would not have to depend upon the wind. However, so far, the Fathers had forbidden its extended use because it was feared the engine's furnes might poison the air and the terrible speeds it made possible might be fatal to the human body.

After which he plunged into a tedious description of the life of his patron saint, the inventor of the first cherubim realizer and receiver, Jonas of Carcassonne, who had been martyred when he grabbed a wire he thought was insulated.

The two sailors found excuses to walk off. The monk was a good fellow, but hagiography bored them. Besides, they wanted to talk of women. . . .

IF COLUMBUS had not succeeded in persuading his crews to sail one more day, events would have been different.

At dawn the sailors were very much cheered by the sight of several large birds circling their ships. Land could not be far off; perhaps these winged creatures came from the coast of fabled Cipangu itself, the country whose houses were roofed with gold.

The birds swooped down. Closer, they were enormous and very strange. Their bodies were flattish and almost saucer-shaped and small in proportion to the wings which had a spread of at least thirty feet. Nor did they have legs.

Only a few sailors saw the significance of that fact. These birds dwelt in the air and never rested upon land or sea.

While they were meditating upon that they heard a slight sound as of a man clearing his throat. So gentle and fal off was the noise that nobody paid any attention to it, for each thought his neighbor had made it.

A few minutes later, the sound came again. This time it was louder and deeper like a lute string being twanged.

Everybody looked up. Heads were turned west. Admiral, some jumped overboard, and some sank into a stupor.

Even yet they did not understand that the noise like a finger plucking a wire came from the line that held the earth together; and that line was stretched to its utmost, and that the violent finger of the sea was what had plucked the line.

It was some time before they understood.

They had run out of horizon.

WHEN they saw that, they were too late.

The dawn had not only come up like thunder, it was thunder. And though the three ships heeled over at once and tried to sail closehauled on the port tack, the suddenly speeded up and relentless current made beating hopeless.

Then it was the Rogurian wished for the Genoese screw and the woodburning engine that would have made them able to resist the terrible muscles of the charging and bull-like sea.

Then it was that some men prayed, some raved, some tried to attack the

Only the fearless Columbus and the courageous Friar Sparks stuck to their duties. All that day the fat monk crouched wedged in his little shanty, doddashing to his fellow on the Grand Canary. He ceased only when the moon rose like a huge red bubble from the throat of a dying giant. Then he listened intently all night and worked desperately, scribbling and swearing impiously and checking cipherbooks.

When the dawn came up again in a roar and a rush, he ran from the toldilla, a piece of paper clutched in his hand. His eyes were wild, and his lips were moving fast, but nobody could understand that he had cracked the code.

Their ears were too overwhelmed to hear a mere human voice. The throat-clearing and the twanging of the string had been the noises preliminary to the concert itself. Now came the mighty overture; as compelling as the blast of Gabriel's horn was the topple of Oceanus into space.



It was a fantastic prison world . . . where slave-creatures of a hundred spheres dreamed and plotted escape! Read—

PLANET OF THE DAMNED

A Novel of Forgotten Men by JACK VANCE

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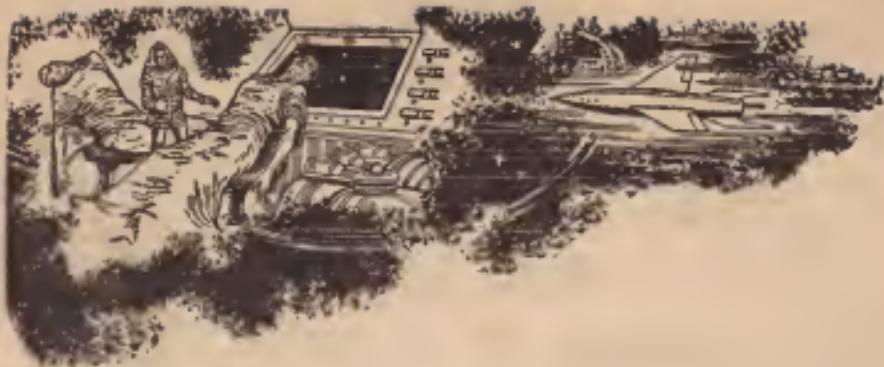


WHOEVER

The Earth-Rocket left for the stars . . .

*and returned bearing aliens, who claimed
to have only the noblest intentions.*

Dared we disbelieve them?



I

THIS is a love story. That is to say, it is a story of the greatest need and greatest fear men know. It is also a story of conquest and defeat, of courage and cowardice, and the heroism that is a product of both of them. It begins in security and isolation; it ends in victory and desecration. Whoever you are, this story has happened to you already, and will again. Whoever you are, however you live, you are writing the ending to the story with every breath you take, with every move you make.

In the cabin of the Service rocket, Scanlitter Six, Sergeant Bolster and his new crewman, Pfc. Joe Fromm, were playing checkers. It was the bored third

heard the click of the keys cutting tape on the receiver.

The sergeant returned his attention to the checker board, and jumped two men before he bothered to look up at the viewer. He saw a streak of light move upward and across the screen in a wide expected curve, from right to left; reached over to inspect the fresh-cut tape, and grunted approval.

"BB-3, coming in at 26°, 13', 37", all correct," he said. "Check 'em off, Joe. That's nine, thirty-eight, and one-oh-seven at the point of entry. All in correlation. Transmission clear. It's your move."

Fromm picked up the clipboard with

YOU ARE

By JUDITH MERRIL

day of a routine one-week tour of duty on the Web, checking the activities of the scanner-satellites that held the tight-woven mesh of e-m-g in a hollow sphere of protective power cast around the System.

Fromm studied the board soberly, sighed, and moved a man into unavoidable trouble. Bolster smiled, and both of them looked up momentarily as they

the scanlite-station checkoff chart, and marked three tiny squares with his initials, almost without looking. He was still staring at the view-screen, empty now of everything but the distant specks of light that were the stars.

"Hey," Bolster said again. "It's your move."

Joe Fromm didn't even hear him. The scanner outside completed its revolution

around the small ship, and . . . *there it was again!* The flaring trail of rockets traveled across the screen, independent of the up-and-down motion of the revolving scanner.

THE sergeant grunted again. "What's the matter? Didn't you ever see one home before?"

"That's the first," Fromm said without turning. "Shouldn't we be recording the tape?"

"Not yet." Bolster surveyed the checker board sadly; he'd have a king on the next move . . . if Fromm ever made another move. "All we got now is radar-recog. Then . . . there you are . . ." He nodded at the renewed clacking of the keys. "That'll be the code-dope coming in. Then we wait till after it hits detection, and we get the last OK, before we send the tape to the Post."

He explained it all dutifully just the same. It used to be when they sent a new man out, they at least took him on a practice tour first. "Look, make a move will you? You got a whole year here to sit and look at 'em come in."

With difficulty, the Pfc. took his eyes off the viewer, touch a piece on the board at random, and pushed it forward, leaving Bolster with the choice of a three-man jump to nowhere, or the one-man jump that would net him his king. The private leaned forward to finger the tape as it emerged from the receiver, reading off the replies to code-dope demands, and signal responses, with a certain reverent intensity. "Did you ever see an illegal entry?" he asked. "I mean, an attempt? Somebody told me there was one on this sect . . ."

At that instant the BB-3 hit the detector field awaiting it at the point of entry on the Web, and generated mechanical panic in an entire sequence of scanlite instruments. Synchronized pulses from the three scanlite stations circling the point of entry transmitted their frustration in the face of the unprecedented and unpredicted; and the

tape in the cabin of Scanlter Six vibrated out of the recorder under the furious impact of the chattering keys.

Alarm bells began to shrill: first in the small cabin, directly over the sergeant's head; then in similar cabins on four other Scanlter rockets within range; finally, about two minutes later, in the Exec Office at Phobos Post, which was the nearest Solar Defense base to the point of entry at the time.

Pfc. Joe Fromm stopped his hesitant query in mid-word, feeling vaguely guilty for having brought the subject up. Sergeant Bolster knocked over the checker board reaching for the tape. He read it, paled visibly, passed it across to the private, and started transmitting to the Post almost at the same instant.

On Phobos, a Signal Tech. depressed three levers on his switchboard before he stopped to wonder what was wrong. Green Alarm meant emergency calls to the O.D., Psychofficer, and P.R. Chief. The Tech. sent out the summons, then stopped to read the tape.

DYTEKTR FYLD RYPORT: BB-3 EM
RADASHNZ INDKAT ALYN LIF—RY-
PYT ALYN LIF—UBORD. RYPT:
DYTEKTR FYLD RYPORT VIA SKAN-
LITS 9-38-107 TU SKANLITR & SHOZ
NO UMN LIF UBORD BB-3.

BOLSTER, SGT/SKNR 8

By the time the Phobos Post Commander got up from his dinner table, the Psychofficer put down the kitten he was playing with, and the Public Relations Deputy pushed back the stool at her dressing table, the crews of all five Scanlites within range of the point of entry, as well as the Signals Tech. on Phobos, knew all the pertinent details of what had occurred.

The *Baby Byrd III*, a five-man star-scout, under command of Captain James Malcolm, due back after almost a full year out of System, had approached a point of entry just outside the orbit of Saturn on the electro-magneto-gravitic Web of force that surrounded the Solar System. It had signalled the correct radar recognition pattern, and replied to

the challenge of the scanlite stations circling the point of entry with the anticipated code responses. Accordingly, the point had been softened to permit entry of the ship, and a standard detector field set up around the soft spot.

Thus far, it was routine homecoming for a starscout. It was only when the BB-3 entered the detector field that the automatics on the scanner-satellite stations began to shrill the alarms for human help. The field registered no human electro-magnetic emanations on board the BB-3. The e-m pattern it got

The membrane of force that guarded the System from intrusion had, in turn, to be guarded and maintained by the men who lived within it. The scanner-satellites were as nearly infallible as a machine can be; they might have run effectively for centuries on their own very slowly diminishing feedback-power systems. But man's security was too precious a thing to trust entirely to the products of man's ingenuity. Each year a new group of the System's youth was called to Service, and at the end of the year, a few were chosen from among

First Contact

IT HAS been remarked before that science-fiction writers, peering into the future, tend to be rather gloomy about the human race. We can only say they have plenty of reason. Case in point is the Army Air Force order during the recent flying saucer tumult to "shoot on sight"—an order later rescinded with confusion. As though gifted with prevision, Judy Merril had already written and sold us a story of man's first contact with aliens from outside; of the confusion, the fear, the suspicion of that contact.

She's done more than write a glib story of the mechanics involved, with the conventional ending. She's dug under the surface, uncovered the motives most of us hide, produced people as real in their future problem as those you know. And her conclusion? It will keep you wondering until the very end.

—The Editor

was undoubtedly alive . . . and just as undeniably alien.

For the third time in the history of the Web, an attempt at entry had been made by unauthorized aliens; and those aliens were apparently in sole possession of a Solar starscout. The third attempt . . . and the third failure: the BB-3 was already secured in a slightly intensified smaller sphere of the same e-m-g mesh that made up the Web, suspended at mid-point between the three circling scanlite stations.

II

the volunteers to man the Scanlites that serviced the satellite stations which comprised the Web.

For even the most adventurous of youths, one further year of Scanliting was usually enough; they came back from their fifty tours Outside prepared to keep their feet on solid ground, and to forget the brief experience of facing the unknown. But each year, too, there were a few of them who learned to crave the intoxication of danger, who could no longer be content to settle back into the warm security of the System. It was these warped veterans of the Web who became Byrdmen.

Secure within the womb-enclosure of the Web, five billion Solar citizens could wreak their wills upon their little

ETERNAL vigilance is most assuredly the price of the peace of the womb.

worlds, and carry on the ever more complex design for nourishment of all the intra-System castes and categories.

Outside, the emissaries of mankind streaked through the heavens on their chariots of fire, spreading the Solar culture through galactic space, spawning the seeds of men between the stars. First went the Baby Byrds, to scout new lands beyond the farthest outposts; then the Byrds, with their full complements of scientists, and giant laboratories, to test the promise of the newly-charted planets; and after them, the giant one-way starships went.

Somehow there were always just enough bold desperate souls, yearning for danger and ready to die for a dream, to fill the human cargo-couches of the colony ships: the Mayflowers and Liverstones and Columbos that left the safety of the Web forever to fix new germ-cells of humanity on far-flung planets in the speckled skies.

Inside the Web, on four inhabited planets and half a thousand habitable asteroids, men lived in the light of the sun by day, and drew their warmth and power from it. By night, they turned to rest at peace; each one under his own sector of the high-domed sky, the hollow sphere of force through which no alien source of light could penetrate and still retain identity.

The Web glowed always with the mingled and diffracted energy of all the universe Outside; no photon passed its portals, no smallest particle of energy came through without the necessary pause for hail-and-password that maintained the calm security of the Web's inner light.

Scanliter Six was already proceeding at full speed toward the trapped BB, acting on normal emergency procedures, when the keys tapped out the order from Commander Hartson on Phobos post to do just that. No stars showed on the viewer; they had stopped the rotation of the scanner and the screen held a steady picture of the three Scanlite stations with a fuzzy hump in the center

that was too bright to look at comfortably. Scanner rays could not possibly penetrate the thick field that held the BB-3 suspended in the Web.

"Well," Bolster said sourly. "Here's your chance to be a hero, kid."

Joe Fromm knew it was childish of him to be excited. He tried not to look interested. "Yeah?" he said.

"Yeah. What happens now is, we get there and code in that the situation is as reported. Then the brass has a conference and they decide somebody has got to investigate, so they ask for volunteers. We're the laddies on the spot. The other boys are all on Stand-by according to this . . ."

He waved the orders tape at Fromm, who caught it and read it through carefully.

"And if we were on Stand-by instead of Proceed, you know what we'd be doing right now?" the sergeant went on, enjoying his own discomfort as loudly as possible. "I'll tell you what. We'd be standing all right, right smack where we were when the tape came in. Not one second closer."

"Stand-by is supposed to mean that you get into the best position for observation," the Pfc. recited.

"Sure. The best position for observation, kid, is in-scan and out of blowup range. So you take your choice: you stay where you are when the tape comes in, or you back out as far as you can and stay in-scan. Anyhow, we're the boys on the spot, see? They're going to want a volunteer to board the Beebee, and I got a hunch," he finished with a faint note of hope, "that I might come out of this in one piece just on account of you are probably going to want to be a hero."

"Could be," Fromm said nonchalantly. "You're senior; after all, it's your privilege."

He was delighted that he managed to keep a poker face through the statement.

JOE FROMM stepped out of the air-lock into space, and let himself float free, orienting, for a slow count of five.

He had done it a hundred times and more in drill, but it felt different now. As in the drill, he made a routine extra check of his equipment: tank, jetter, axe, welder, magnograpple, mechitape recorder, (no radio in an insul-suit), knife, gun, signal mirror, medikit. All OK.

He set the jet at gentle and squirted off toward the glowing ball of force that held the starscout. Two more squirts, and he was as close as he could get. He flashed the mirror twice at Bolster in the Scanliter, to start the passageway in the sphere opening. This was the last contact till he came out again. If he...

If I come out again . . . he thought the whole phrase through deliberately, and was surprised at the way his mind accepted the possibility, and dismissed it. He felt tremendously alive, almost as if each separate cell was tingling with some special vigor and awareness. And in the center of it all, in some hidden part of himself, he was dead calm, almost amused. Was this what they called courage?

He flashed the mirror again. Bolster was certainly taking his time. All he had to do was throw a switch. Fromm began flashing angry code with the mirror and kept it up, knowing Bolster couldn't answer and rejoicing in the knowledge, until he saw the opening appear in the ball of force, and begin to expand.

Then he realized it wasn't simply throwing a switch. Once the passageway-mechanism was put into operation, it had to keep going on its own, opening and closing at intervals so as to permit him egress, and still not let enough e-m-g through in either direction to disturb the power-stasis inside. It took only a little bit of computer work . . . but quite a bit more intricate checking of the relays, to make certain the automatics would not fail.

He had to hold himself back to keep from diving through as soon as the hole was as big as his suit . . . but he waited, as he had been trained to do, until it stopped enlarging. The computer knew

better than he did how much space he needed.

Then he squirted forward and through. The BB looked strange, hanging there in the middle of nothing, with an air of polite impatience, waiting to finish its passage into the System.

Joe grinned, and duly spoke his thought out loud for the record. "Every single thing that passes through your head," they'd said over and over again in school. "When you're on any kind of solo operation, you want to be sure the guy who takes over knows everything you did, no matter how crazy it seems. An idea that doesn't connect for you could make sense to him."

So Joe Fromm told the mechitape attachment on his suit that the starscout looked impatient. He kept talking, describing his actions and thoughts and emotions, as he approached the ship cautiously, and opened the outer lock door. More waiting, and he informed the tape that the air lock was in operating condition.

Then he was in the ship, and omitted to mention in his running commentary that he was scared silly. Down the corridor . . . open the cabin doors one at a time . . . empty, empty . . . not empty. Go on in, Joe; he's out cold; couldn't hurt a fly.

"One of the aliens is in this cabin. This is the third door I have opened, second cabin to the right going down the corridor from the lock to Control: . . . he's either dead or unconscious . . . hope they're all like that . . . he's big . . . hope they're not all like that. Maybe ten feet tall, sort of curled up on the bunk, might have been asleep." Might still be, might wake up.

He gulped and decided he'd better put it on record. "Might still . . ." No, that was foolish. These characters had registered e.m. radiations on the instruments in the stations. They couldn't stay conscious inside the e.m.g. field without insul-suits. Anything strong enough to stop a BB in its tracks would stop a man too.

But it's not a man; it's . . . "It's definitely humanoid . . . hard to believe any alien creatures could evolve so much like humans. No tentacles, nothing like that. Arms and hands look like ours . . . fingers too. He's wearing some kind of robe . . . hard to get it loose with these gloves on, can't see the legs for sure, but the arms are human all right. Face is different, something funny about the mouth, sort of pursed-up-looking. Closed, can't see the inside . . . guess I can try and open it . . . no, later, maybe. I better take a look around. Anyhow, this guy is a lot like you and me only almost twice as big. Not very hairy, dark skin, big black eyes . . . how can anything that's not human have eyes that look at you like that, even when he's out cold? I don't know . . . going out now, next cabin, second door on the left . . .

"Here's another one . . . on the floor this time, kind of crumpled up . . . must have been standing when the field hit, and fell down. Nothing new here . . . wait a minute, this fella must have cut his hand on something when he fell . . . yeah, there's an open locker door, with an edge. Blood is dried, looks like it's a lot darker than ours, but it's crazy how human it looks anyhow . . . Going out again now . . . in the corridor, no more doors here . . ."

There were two more of them in the control room: one strapped in the pilot's seat, squeezed in really; he just about could make it. The other was slumped over the solar analog computer.

"Looks like he was checking the landing data," Fromm reported. "These guys sure were confident. Two of 'em off shift when they were coming in, and everything set for a normal landing. Didn't they figure on any trouble at all? They should have realized they couldn't just sit down on one of our planets. Hell, they knew about the Web; they gave the code-dope straight, and they decelerated to approach, and had the correct angle . . . I don't get it . . . Here goes once around the room now. I will

check all instruments.

"Starting from the door, and turning right: Star-chart microviewer intact and operating, films filed properly, I think. Won't take time to check them all now, but they look right . . . Radio desk appears in normal condition for use, can't test . . . Space suit locker is full of strange stuff, will come back to examine . . . analog comps come next; this guy is sprawled all over them . . ."

He followed his nose around the cylindrical room, till he came back to the door again. Everything was, or seemed to be, in good working order. A few adjustments had been made in levers and hand-holds, to fit the aliens' larger hands; otherwise, virtually nothing had been touched except for normal use.

"Okay, I guess I better start on the locker now . . ." But he didn't want to; he felt suddenly tired. Not scared any more . . . maybe that was it. Now he knew he was safe, and there weren't any booby traps or anything seriously wrong, he was feeling the strain. Let Bolster do some work too, he thought angrily, and almost said it out loud for the tape. Then he realized that his sudden pique was really just weariness, and at the same time he became acutely aware of hunger and an even more pressing biological urge. Time to go home, Joe. Always leave the party early, that's how to stay popular.

He ought at least to get the robe off one of the creatures first, and make sure about their anatomy, but he had an odd reluctance to do it. They were too human . . . it seemed as if it wasn't fair somehow to go poking around under their clothes.

Hell! Let Bolster do it! He left the ship.

III

ALONE in the Scanlitter, Joe Fromm played his meebitape into the permanent recorder, and turned up the volume so he could hear it himself, and get everything clear for his report to Phobos.

Some of the stuff sounded crazy, but he could tell what part was fact and what was just his own imagination. He chewed on a pencil end, and occasionally noted down something he should be sure to remember.

Altogether, composing the report was more painful than visiting the ship had been. He had just started putting it onto the transmitter when he saw the indicator for the outer lock light up. Bolster sure hadn't stayed on that ship long! He felt better now about coming back himself.

The sergeant came inside shedding his insul-suit, and bursting with excitement.

"You should of looked in that locker, kid!" He was triumphant. "Anyway, it's a good thing for me you didn't. This is the kind of good luck bonuses are made of." He removed an envelope carefully from the storage pocket on the outside of the suit. "Got your stuff in yet? I want to shoot this to them fast!"

"I just started . . ." Fromm said.

"Well, we'll flash this, and you can finish up afterwards."

He handed the envelope to the younger man, and started climbing out of the leg pieces of the suit. "Go on! Read it, man!"

Fromm opened the flap and unfolded a piece of official Service stationary. To whom it may concern: it said on top, and then right underneath: To the Staff Officers of Solar Defense:

"The other men have asked me to write this message, and I guess I can do it all right, but I'm afraid I'll have to be pretty informed. I've tried to write it up in military report style, only it's just not the kind of thing that Service language fits.

"For one thing, the very first line of the report form stopped me, because we don't know where we are. Only the Captain knew our orders and he's dead now, and we couldn't find his log, or any of his papers, anywhere in the ship.

"We've set a course for the big fellas by backtracking on the analog comps. That means it will take them almost as

long to get back as it took us to get there, but that's just as well, because it will bring them in about the time our tour is due up, and maybe that'll make it easier for them to get in.

"We've done our best to explain to them all the dangers involved—not being sure of the course, even, and being pretty sure you folks won't let them through. But we can't talk to them as easy as they talk to us. We can get over general ideas all right, and any kind of thought that has a solid object nearby to attach to, but the idea of people, of humans that is, not wanting to let them into the System—well, even if we talked the same language . . . that is, if they talked a language at all that we could learn . . . I don't think they could understand that idea.

"I'm not going to try to tell you anything about them because if they get far enough to show you this, they can explain everything themselves. This message is just to let you know that the four of us are here, safe and sound, and staying behind of our own free will. Since Captain Malcolm's suicide, there's nobody to order us home, and we like it here. Besides, there isn't room enough in the BB for more than five people—humans, I mean—or four of them (they need more food). And they want to send four along on the trip; I think they picked out their leading scientists in different fields, so they can get as much information as possible, and be able to answer your questions.

"I don't know. Probably a Psychofficer or some of our scientists will be able to communicate better with them on this kind of thing. We get along fine for everyday purposes, but you see, I'm not even sure what kind of scientists they're sending.

"The only thing the others and I are sure of, and that's what this message is for, is that you can trust these big fellas up to the limit. They've treated us fine, and they . . . well, it's a funny way to put it, but "like" isn't strong enough . . . they just seem to love everybody,

humans as well as their own kind.

"We will wait here for further orders. You can probably figure out where we are from the analog comp records.

"Respectfully yours,

"George Gentile, Byrdman 1st Class,
and on behalf of

"Johann Grauber By/2

Tsin Lao-Li, By/2

Arne Carlsen, By/3."

"I DID a tour of duty with Jim Malcolm once," the Commander said slowly. "He was a pretty good guy. I... liked him. It's hard to think of him committing suicide. I wish this Gentile had been a little more specific."

Lacille Ardin, Public Relations Deputy at Phobos Post, skimmed the message tape rapidly, and passed it along to the Psychoofficer. She cocked one feathery eyebrow cynically. "These boys just don't make sense," she said. "They've been sold something all right... but what?"

The Commander shook his head, waiting for Dr. Schwartz to finish reading. "Well, Bob?" he said, as soon as the Psychoofficer looked up. "What do you think?"

"I'd like to see that log," Schwartz said thoughtfully.

"So would I!" Commander William Hartson had earned his position as Assistant Chief of Staff for Solar Defense. He was that rare thing: an officer admired equally by the general public and by the men who worked under him. At sixty-eight years of age, he was still in the prime of health and vitality—but old enough to have seen his fill of violence, danger, and death. He was indecisive in action; but a decision involving the lives of others would be made with care.

Bob Schwartz had worked with Hartson long enough to understand these things. "This Captain...?" he asked, "Malcolm? Would you say he was... well, a fairly typical line officer?"

The Commander permitted himself a faint smile. "Trying to figure the 'military mind' again, Bob? As a matter of

fact, I think Jim Malcolm is—was one of the few officers who'd fit your picture pretty well. Courage, devotion, precision—a stubborn s.o.b., who went by the rule book himself and figured everybody else could do at least as much... but the kind who'd lay down his life for his Service without thinking twice. It's just suicide that doesn't make sense..."

Hartson's voice broke off, and for a moment the only sound in the room was the shuffling of paper. Schwartz still held the message tape, running it through his fingers as if the feel of it would somehow help him to understand its meaning better. Lucy Ardin pushed away the pad on which she'd been scribbling Hartson's explanation of the force-sphere that was holding the BB-3 captive and its alien crew unconscious.

"God, what a story!" she whispered reverently into the silence. She ground out a half-smoked cigarette in the Commander's big ash-tray, and stood up; the silver-sequinned dinner gown in which she'd answered the alarm glittered painfully under the overhead light. It was entirely typical of Lucy that when the call-bell rang in her bedroom, she had pushed back the stool from her dressing table without taking even the extra instant's time to complete the slash of crimson on her lips. Then picking up the portfolio that was always ready for use, she had arrived at the Exec Office, with the lipsticking finished en route, within seconds after the two men who lived on the Post.

"All right," she said briskly. "What happens now? We stitch up some six-tentacled strait-jackets and make our visitors nice and safe, then we take the field off and haul 'em down? Where to? What do we do with them afterwards? Who gets to interview them?"

The Psychoofficer looked up sharply, and Hartson chuckled. "Relax, Bob. I'm afraid it's our baby all the way down the line. I wish I was looking forward to it like you two are. I have a hunch it may turn out to be something of a mess... The aliens, by the way, are humanoid,

Miss Ardin. Perhaps you'd like to see the tape again? I believe there's a detailed description . . . hey, Bob? You're done with it, aren't you?"

"Sorry." Schwartz handed it to the girl, and snapped out of his abstracted mood. "Is it safe to leave them in the stasis a little longer, Bill?" he asked.

"Can't say for sure. With humans, twelve hours doesn't do any harm. These fellas may be dead already for all we know. Best we can do is assume they react like us."

"It seems to me that log must be somewhere on the ship," the Psychofficer said. "If there's time, I think it might be a good idea to try and find it—before we decide anything. A man like Malcolm would have made sure the papers were safe, if he had any way to do it at all."

"You're right." Hartson, too, came up from his reflections, and sprang into action. "You're damned right! If it's there we can find it. And if we can't—well, that's an answer too!"

IV

JOE FROMM went back to the BB-8 with two other men from the stand-in Scanlitters that had now been ordered up to assist. Between them, they searched the *Byrd* from nose to nozzles, and behind a panel in the electrical repair cabinet, they found the ship's papers: charts, orders, and the missing log.

Fromm took time to open the log and look at the last page: he hardly had to struggle with his conscience at all over it. Under the dateline, in neat typing, it said:

"Carlsen should have been back an hour ago. Under the circumstances, that means they've got him too. My error was in not leaving after I talked to Tsin last week. Three of us could have brought the ship back. Alone, I don't believe I can do it.

"I have considered taking off anyhow, simply in order to make certain the natives do not gain any further knowledge of the ship. My only choices now

are betrayal or self-destruction, and between these two, I am afraid I have no real choice. I must therefore pick the most effective means of suicide, and after giving the matter careful thought, have determined that a systematic destruction of the control room is a wiser procedure than the complete removal of the ship from the planet.

"By following this course of action, I can at least hope that a future expedition, or perhaps even a rescue-ship, will find this log and understand the danger here.

"This evening, I shall have my last supper in style. Tomorrow, I shall finish the dismantling of the controls, and hide this book, together with the more important of the ship's papers . . . and may God have mercy on my soul!"

Below that, in almost equally neat and legible a script, were two paragraphs.

"Once more I have delayed too long. Gentile, my firstclassman, is at the outer lock now, and he has three of the natives with him. Apparently they now have him sufficiently under control so that he will do for them what they have not dared to do for themselves. They are coming into the ship.

"I expect they are coming for me, and I cannot risk exposing myself to their control. I know too much that they can use. The work of dismantling the controls is barely started; I'm afraid the enlisted men can still repair it readily, but none of them, after all, even know where we are; the star-charts and orders will be hidden with this log. I can only hope the papers remain hidden until the right people come to find them."

Underneath, there was a careful signature: "James Malcolm, Captain, Solar Byrd Service, in command *Baby Bird III*," and in parenthesis below that, one word of macabre humor, "(deceased)."

They ordered Scanlitter Six down to Phobos Post, to bring in the papers of the BB-8. There was too much material to transmit by radio.

Bolster grinned and slapped his Pfc.

on the back. "We're both a couple of bloomin' heroes," he said. "Just the kind of a hero I like to be. Some other guys'll be around when they decide to blast that Baby, and you and me can watch it all from the Post."

"Blast it?" Joe looked up from the log, holding his finger in the page. "You're kidding. Why would they . . ."

"Brother, you got the reason wrapped around your finger. One look at that, and they'll blow those babies clear back to where they came from! You can take a chance on a guy who fights fair, but these fellas—"

"How do you know they're fighting us?" Fromm demanded. "You saw the Byrdman's note, the one you brought in. . . . This guy Malcolm was off his rocker!"

"Well, I'll buy that one, too. You can't tell with the brass when they get an idea in their heads. But look, kid, you gotta grow up some. That note I brought in—it's pretty easy to get a guy to write something like that if you got him hypnotized to start with, and you're twice his size anyhow—not to mention there being a whole planetful of your kind and only four of his. I can tell you anyhow, that's how the brass'll see it. Solar Defense doesn't take chances."

"Did you read what it says here?" Fromm insisted. "The part where Malcolm tells about talking to Tsin? It just doesn't make sense to take it the way he did. He was space-happy, that's all. The Commander isn't going to swallow this stuff."

"You wait and see," the sergeant said again. "And when you do, you're gonna be awful glad you're down there instead of here."

"I . . . look, I know this sounds crazy. . ." Fromm put the log down finally, and blurted out the rest of it. "I'd like to stick around. If anybody goes back out there, I want a chance to take another look at those guys. You think you could take somebody from one of the other ships down with you, and leave me here?"

"It not only sounds crazy," Bolster said. "It is crazy. But it's your body, son. You want to stick around, you can bet nobody else does." He shook his head uncomprehendingly, and began punching out a message to Scanliter Twelve, where Chan Lal would jump at the chance to change spots with his weak-witted Pfc.

"**I ORDERED** him to return to ship immediately. He refused. His exact words, insofar as I recall them, were, 'Captain, I wish I could do as you desire me to—or even better, that I could convince you to come with me and visit our friends. They *are* our friends. If you would give them a chance to talk with you, I think you might understand better. It is hard to explain with just words. But I simply *cannot* go back now. (Emphasis is mine . . . JM) You are a married man, sir. Perhaps I might feel differently if there were some love waiting for me at home too. But I am young and not yet married, and . . .'"

"I broke in here, thinking that I might be able to use persuasion, where authority had failed. I pointed out that there was very little likelihood he would ever be married, if I decided to take up the ship, abandoning him and Gentile on the planet—as of course, I have every right to do in view of their outright insubordination. The natives here, for all their startlingly humanoid appearance, are twice our size, and are almost certainly not suitable for breeding, from a purely biologic viewpoint.

"He replied quite earnestly that he hoped I would not take that drastic step . . . that he did not wish to remain permanently among the natives, but that he felt he 'had to' stay long enough to become fully acquainted with them and with their way of life, and to 'be healed of all the hurts and scars of a lifetime in the System.'

"The conversation went on for some time, but the parts I have already recorded contain the gist of it. There was one thing Tsin said, however, that I

feel should be included here, along with the train of thought that followed it. If anything should happen to me or to my ship, I suspect it will in some way be connected with my low susceptibility to the emotional point he seemed to be trying to make.

"Tsin reminded me, during the conversation, of a story I have always considered rather bathetic: that of the little orphan girl, in the days before the creches, who threw a note over the high wall of the 'orphanage' saying: 'Whoever you are, I love you.'

"This anecdote, I gathered, was supposed to define for me the nature of the emotional 'healing' he was receiving at the hands—or I suppose I should say the minds—of the natives.

"This particular bit of bathos has been annoying me for years. I have had the story related to me at least three times previously, always to illustrate some similarly obscure emotional point. And I have always wondered afterwards what the end of the story might have been.

"Now it seems very important to be able to foresee the results of the child's action. What happened when the note was picked up and read? And why did the child write it?

"It is this last question, I think, that bothers me the most. A sentimentalist might answer that she meant it, but I find this unlikely. At best, I believe, she meant that she hoped whoever found it would love her; and that is the very best interpretation I can put on it. It seems even more likely that her motive was even more specific: if she threw such a billet doux over the wall regularly, I should think eventually one of the sentimentalists would have found it, made some response, and provided the means for her to get over the orphanage wall into the world outside.

"The natives here have a fairly highly-developed technology, and quite obviously a very highly-developed psychology or mental science of some sort. They are telepaths, after all. And they have taken no pains to conceal from us their interest

in acquiring a means of space travel.

"There is nothing to pin down, no way to make certain of their real attitudes toward us. They have greeted us warmly, and have done nothing to indicate any hostility, or to harm us in any way—nothing but walk off with two of my crew in an apparently friendly fashion.

"Perhaps the wisest course of action would be to leave now, while I still have two men on board. But it is a hard decision to make—to maroon two of my men on an alien planet.

"If I believed for a moment that Gentle and Tsin are responsible for their own actions, I should not hesitate to make that decision. But their behavior is so entirely 'out of character' that I can see no explanation except that they are acting under some form of hypnotic control. As I see it, my duty is to make every effort, including main force, to return them to the ship before I leave."

V

HARTSON read it for the fourth time, and slapped the typescript down on the desk. "I . . . hell, Jim Malcolm was a friend of mine! How can I tell? It sounds like him . . . sure! It sounds like every report he ever wrote, except where it sounds like him being pie-eyed in a bull-session."

He sat down, and let the blank bewilderment he felt show in his eyes as he faced the Psychofficer. "Well, what do you say? I can't decide this one by myself."

Courtesy turned him, halfway through the question, to face the PR Chief on the other side of the desk. Courtesy, and common sense, both. Officially, Lucy's job was just to get out the news—or to keep it in, as seemed wisest. The catch was in that last phrase. In practice, she was both public censor and interpreter-at-large for the Post; and her Civil Service appointment made her the only authority on Phobos who was independent of the Service.

The Commander had been dealing with

the P.R. Bureau long enough so that in six months at the Post, Lucy had never yet had any cause to remove her velvet glove. It was easy to forget sometimes about the iron beneath it; one might almost think that she forgot herself.

"I'll check to Doctor Schwartz," she demurred now.

Schwartz managed a smile. "Will you please stop being polite?" he asked. "You've got an opinion. Let's hear it." She hesitated, and he added: "I don't even like what I'm thinking. I better think it a little more before I say it."

"All right." Her voice was controlled, but her eyes gleamed with excitement. She was talking at Schwartz, almost ignoring the Commander. "I think these fellas have the biggest thing since e-m-g. It's the one thing we haven't been able to crack at all; you know it as well as I do. They've got the unbeatable weapon—the psychological weapon. You can't fight 'em, because you don't want to. People call modern P.R. mass hypnotism, but the techniques we've got are child's play compared to what those guys can do. They've got the real thing. The question is, can we get it away from them? Has Psych Section got any way of handling something this hot?"

"I take it," Hartson put in drily, "that you are convinced of the accuracy of Captain Malcolm's interpretation of the events?"

She looked puzzled. "Why . . . yes. How else can you explain it? Has there ever been a case of desertion like that before?"

"Never," he said crisply, and turned to the Psychofficer again. "All right, Bob. You've had some time now. Say your piece."

"Let me start this way," Schwartz said hesitantly. "I think Lucy is right in one respect anyway . . . what they've got is an irresistible weapon. If it is a weapon. But to accept that idea, we'd have to presuppose the existence of a war, or at least hostility between them and us. There's a verse that's been running through my head for the last

hour. I'm sorry, Bill, to be so round-about. Just try to put up with me a few minutes, will you? I can't quite remember the whole thing, but it's about an 'enemy' who 'drew a circle to keep me out.' Then there's a line I remember clearly: 'But love and I knew better. We drew a circle to bring him in.' You see what I'm driving at? Certainly our basic attitude toward any alien is potentially hostile. They are guilty until proven innocent."

"We've been all over that ground, Bob," Hartson broke in. "I know your opinion, and you ought to know mine by now. I don't like it either, but it's the reason why we have been consistently successful in such contacts."

"Consistently victorious, I'd say. All right, let's just put it that I am emotionally more inclined to accept Gentile's attitude than Malcolm's. I see no evidence to support the view that these people are using a hypnotic weapon; it is at least as likely that the feeling they projected at our men was honest and uncalculated. Why not assume for a moment that the occupants of that ship really are four of their leading scientists, sent here to exchange knowledge with us?"

"You've got a point there," Lucy Ardin said unexpectedly. "An act of aggression against these four could make trouble if they were on the level to start with. I think it gets down to a good old-fashioned problem in shielding. Has Psych Section got any way of handling these boys if we bring them in, Doc?"

He considered for a moment.

"That depends. We've got anti-hypnotics, and we've got personnel specially trained against susceptibility to hypnosis. But the Beebee had the same drugs, and should have had some trained personnel too. There's a point, Bill. I'd like to see the basic psych ratings on all five of those men, if you can get 'em. Especially Malcolm's. I could get the papers myself," he added, smiling weakly, "Through channels, it wouldn't take more than three or four weeks. Can you get 'em fast?"

"**I CAN TRY.**" Hartson jumped at the chance for concrete action. He rang for an aide, and scribbled an order to Records in his own handwriting. "Put this on the facescan," he said briskly, and give it a top-rush priority. I think I see what you're getting at, Bob," he said, as the door closed behind the uniformed girl. "I remember I was kind of surprised myself when I heard Jim had gone into the Byrd Service. Couldn't imagine him going Outside voluntarily. He was an Earthman all the way through. Why he didn't even believe Marsmen were really human. Is that what you wanted to know?"

"Part of it. That much was pretty clear in his report. I want to know the comparative resistance of the crew members to hypnosis, and what the other men's attitudes were toward alien life—things like that."

"I thought all Byrdmen had to pass standardized tests for that," the PR Chief said, just a little sharply.

"They do. At least, the enlisted men do. But there's still a range of individual variation. And officers . . . well, they have a tough time getting enough men to command the Beebees. I think just about any regular line officer who volunteered would pass the test . . ."

He looked to Hartson for confirmation, and got a reluctant nod; then he went on. "Even with the men, it depends where they took their tests. That'll show on the papers. Psych Section isn't too—efficient—in some spots."

"I'll bear that in mind," Lucy said tautly. "But I'd still like to know just how much Psych Section right here is equipped to do. You say you've got the drugs and the personnel, Doctor. All right, then, if the Commander brings these fellows in alive, can you handle them? If you can't . . ." She shrugged.

"That depends." The Psychofficer declined the challenge of her tone, and went on deliberately: "We can handle it all right . . . if it's as simple a thing as hypnosis. It happens that I don't believe Captain Malcolm was right about that.

I can tell better after I see his psych ratings . . ."

"All right! Then I take it we're going to sit around here for the next few hours waiting to see what the tests say? That gives you a little more time to make up your mind. Well, if I'm going to spend the night here, I'd like to be a little more comfortable. Do you mind if I run home for a change of clothes while we're waiting, Commander?"

Hartson eyed the shimmering stiffness of her dinner gown unhappily. "I'm sorry, Miss Ardin. I hope you'll understand. This qualifies as a Major Policy decision, and I'm afraid I'll have to ask you not to leave until we are finished with whatever we decide."

She shrugged again, and sat down. "Could I have a typewriter? I could be getting some of my story into shape."

Schwartz laughed. From the vantage point of the smoking jacket and carpet slippers in which he'd answered the emergency call, he said easily, "Bill, couldn't you order something from Supply for the lady? S.I. coveralls, or something like that? It might make a difference in our decision if she could be more comfortable."

"I can do that," Hartson said shortly. "And of course you may have any equipment you wish, Miss Ardin."

"Thank you, Commander," she said, too sweetly. "I'm sure it will help. I wonder if perhaps we could facilitate matters by sending for the doctor's uniform too? If I'm to be made more flexible, I suspect a change of clothes might make him more decisive."

Hartson grinned. "She's got a point there, Bob," he said mildly.

"All right!" The Psychofficer stood up abruptly, paced the length of the small room, and wheeled to face them. "All right, I'll tell you what I think. I think the human race is too damn scared and too damn hungry to be able to face this thing. Hungry for security, for reassurance, for comfort—for love. And scared! Scared of anything different, anything Outside, anything one degree more in-

tense than the rules allow.

"Also—pardon my bluntness, Bill—I think Captain Malcolm's reaction was typical of all that's sickest in our System. The very fact that we are seriously sitting here considering how much of a menace these four individuals represent—four humanoid beings, who come armed with nothing but a message of love! That very fact—that we sit and strew over it, I mean—makes them dangerous.

"You want to know what I think? I think what they've got—whether it's a weapon or a natural way of life, whether it's hypnotism or open-hearted honesty, or anything else, is—not unbeatable, not ultimate, not any of the other adjectives that've been thrown around here tonight, but, specifically, irresistible.

"I think all of us—you, Bill, wanting to do the 'blameless' thing—and you, suffering through hours of torment in those ridiculous clothes because they're supposed to make you 'attractive'—and maybe me most of all, hating to say what I know because it's brutal—all of us and the rest of the System too, have one crying need that the lousy culture we've made for ourselves can't possibly fulfill.

"We want love. We need love. Every poor blessed damned soul among us. And we need it so much, it can be used as a weapon against us!"

"Understand, please, just because it's important to me to have it on the record, that I don't for a moment believe it's hypnotism they're using. I think they mean it. But..."

"Well, at last!" Lucy Ardin sighed and moved a tense finger for the first time since he'd started talking. "Then you think you can handle it?"

VI

SCHWARTZ stared at her in amazement. "Didn't you hear anything I said? No. No, I don't think I can handle it, or that anybody else can. I don't believe it's hypnosis, but I can't see that that matters. Or rather, I might feel

more at ease about it if I could believe that."

"Damn it, Bill, I hate this! I want you to understand clearly that the advice I am giving you is against my own inclinations and instincts. Now look: if it is to be regarded as a weapon—and I see no other way—we may regard it from the point of view of Solar Defense—then it is irresistible. There is no way to tie or bind the minds of these—people—except by keeping them unconscious, which would automatically defeat any purpose of investigation . . ."

He picked up his copy of the summary and excerpts from the log, rifled through the pages, and threw it down again, sadly. "Bill, I'd give all my ratings, and ten years off my life for the chance to talk to those guys myself, and find out . . . but my advice as an officer of Solar Defense is that we have no choice but to destroy the aliens before they regain consciousness."

Both the others were on their feet as he finished.

"God damn it, Bob!" Hartson shouted. "You can't just . . ."

"Don't you see?" Lucy Ardin's crisp voice cut in? "All he's saying is he doesn't know; None of us know, and I want to find out! I'm not scared of it. Maybe you need love that bad, Psych-officer, but I don't!" She sat down again, triumphant and breathless.

The Commander ignored her. "Is that your last word, Bob? Shall I take that as your decision?"

"I'm afraid so, Bill. You heard Lucy just now. Remember what Malcolm was wondering, about the end of the story of the little orphan girl? That's one answer. In terms of the little girl, it would mean that whoever found the note took it back inside and told the authorities that one of their children was writing dirty notes—so the kid could be investigated. That's just one ending. There are lots of others, but don't forget the one he was afraid of. Don't forget all the sentimentalists—like me for instance. If I were to forget my duty as an officer

of the Service, I would want nothing more than to get the little girl out of the orphanage, just so she could love them.

"And don't forget, either, that there would be any number of different answers besides. And that everyone would feel strongly about his own solution. You have your choice, Commander. You can destroy them in the name of Security and Safety—or you can risk a System-wide civil war, and total 'conquest' by an alien race. What'll you have?"

Commander Hartson smiled wryly. "I'll take vanilla," he said distinctly, and rang for an aide. The uniformed girl appeared in the doorway. "Jenny," he said, "I want orders typed up for countersigning to arrange all details for the moving of the *Baby Byrd III* to Deimos Isolation Post immediately. The ship will be piloted by Pfc. Joseph Fromm, now aboard the Scanliter Twelve. We will want a continuous radio report from the pilot starting with his entry into the ship.

"Separate orders are to go to Scanliters Seventeen and Twenty-two, to follow the BB-8 in with all artillery on the ready. They are to maintain radio silence, with vocal reception open. Private Fromm is to know nothing of the ready-fire orders. The word "apple" will be the signal to fire, if I decide it is necessary to destroy the ship. Is that all clear?"

"Yes, sir."

The door closed quietly behind her, and Bob Schwartz stood up and walked around the desk to shake the Commander's hand.

"They say you're a great man, Bill," he said quietly. "I'm beginning to think you are. Now, I'd like to ask a favor I'm not entitled to. I did my duty as I saw it, and gave you my advice as an officer of the S.D. Now I'm asking for a privilege as an old friend. If you're going to try bringing that ship in, I'd like to be aboard her on the way. I want to be there when they come to. I'm a qualified observer and it shouldn't take more than an hour to get me up there. It won't be much of a delay."

The Commander's voice was icy. "I

think you know that's impossible, Bob. Certainly you're qualified—too qualified. We have to have a man on that ship, but we only need one man, and he has to be expendable. The only qualifications he needs are to know how to pilot the ship, and to be able to talk continuously. We already have a volunteer for the job, and he's acceptable. If you want to give him any instructions about what to look for or what to talk about, you have five minutes to prepare them. After that, the action will start. You understand, I am taking your advice. But I feel I must first prove to myself that your premises are correct. I want to see just how irresistible they are."

He turned to the P.R. Chief, and went on as coldly: "You are free to leave now, Miss Ardin. You'll want to hear the reports as they come in, I imagine. It should be about twenty minutes before the ship is actually under way."

PFC JOE FROMM walked through the inner airlock into the BB-8, climbed out of his space suit, and made a quick examination of the cabins. Three of the aliens, still unconscious, were bound ankle to ankle and wrist to wrist on the floor of one cabin. That door was to be locked. The other cabin was empty, as it was supposed to be.

"Cabins okay as planned," he muttered into the mouthpiece, strapped to his chest. "Corridor and cabinets clear." He entered the control room, and tested the manacles restraining the outside limbs of the alien who had formerly occupied the pilot's seat, and was now secured in a specially built chair. "Alien in control room unconscious and I'd say pretty safe, the way he's tied down. Instrument check: electronic controls, okay; radar, okay; rocket controls . . ."

He went down the list, cheerful with the familiar routine, talking easily, untroubled by the need for extra breaths between words that had plagued his inspection of the aliens.

"I am now strapping myself into the pilot-seat, and preparing for takeoff.

Ready to leave as soon as I am signaled free . . . signal received, blasting off now . . . utilizing minimum acceleration, coming in at Deimos on direct approach . . . the fella in the control room here seems to be wiggling his toes . . . you wouldn't think they'd have toes just like us, would you? . . . he's coming to, all right . . . I am on direct course to Deimos at min-axe still . . . I think maybe everything'll work out okay . . ."

He had to watch the instruments with one eye and the alien with the other. The—whatever he was—didn't seem to be trying to bust loose at all.

"He's moving his head now, and looking around . . . looking at his handcuffs, and the chair, trying to turn his head around to see where his legs are cuffed underneath, but he isn't struggling at all . . . looking me over now . . . I caught his eye for a minute just then, or he caught mine. I think he wants me to look at him again, but I'll try not to. He has to be able to fasten my attention on something to hypnotize me, doesn't he? I am moving my eyes around, checking instruments, and thinking as many different thoughts as I can . . .

"We are now approaching an orbit around Mars, decelerating. My radar screen shows too Scanlites following us . . . should they be so close inside range in case it is necessary to fire on us? . . . Please don't . . . *that's not my thought!*

"It . . . he's thinking at me . . . they are telepaths, all right. He doesn't seem to, I don't know, the first thought I was sure wasn't mine was, please don't fire on us, we are friends. It seemed so natural I started to say it. His thoughts aren't in clear words now . . . I heard once that to 'receive' stuff like this you have to not concentrate . . . something like that. Maybe I'm trying too hard . . . No. I'm too tense . . . that was his thought, not mine, he was telling me not to be so tense and I'd understand . . .

"He says—you can call it 'says'; it's enough like talking—he says they're friends, they like us. They want to be friends. He keeps saying it different

ways but it's the same feeling all the time, with different—pictures, I guess to go with it . . ."

Pictures! Hey, stay out of there!

"He wants me to . . . to love him. That's what he says. He . . . (men don't feel that way about each other . . . no!) . . . loves me, he loves all—not men, some kind of thought for his own people, and all—living creatures—those are on his home planet. He loves all men, this time he means men."

That was silly of me . . . he wasn't being nasty . . . he just meant love . . . that picture was mine . . .

"He says the pictures I get for meanings are all my own, so I might get his meaning wrong sometimes. He makes a picture in his mind, the way he'd visualize a thought on his world, but I see it the way it would be on mine . . .

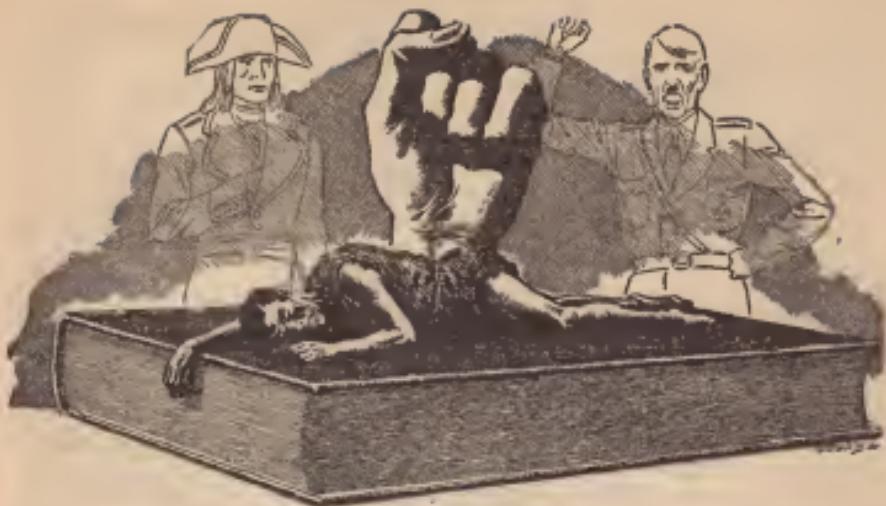
"Listen, Captain Malcolm just didn't understand. This is *important* . . . they don't mean the kind of thing we do when they say 'love.' They mean liking and sharing and . . . we haven't got the right words for it, but it's all right. It's not a *grabby* feeling, or taking anything, or hurting anybody. There's nothing to be afraid of. The only thing that Captain got right was that story about the kid . . ."

On Phobos Base, Lucy Ardin's typer clacked eagerly, while Bill Hartson and Bob Schwartz turned from the viewer together. Hartson was a soldier; his face was stern and set, as he reached for the mike. The only emotion he showed was the single flash from his eyes to his friend's when he looked at Schwartz and saw the tears of frustration rolling unashamed down the psychofficer's face.

". . . the one who threw the note over the wall. That is the way they feel. He's telling me now, to tell all of you, he's agreeing, he says I understand now, it's the way human beings love when they're kids, like the note the girl wrote: Whoever you are . . ."

The Commander spoke one word. "Apple."

". . . I love you."



THE BOOK of the DEAD

By H. H. WEST

There are more ways to conquer a world than by fighting for it

IT WAS the 218th year after the Great Famine, but the Keeper of Things Found was hungry. He straightened his thin shoulders and tried to stop shivering as he passed between the soldiers at the entrance. Soldiers weren't the only people important to the Tyrant. They got the heaviest skins and the most food, but the Keeper of Things Found was important too. He could read and was excused from fighting. This was fortunate because of the increasing pain surrounding the lump in his chest.

The soldiers remained silent, fearful of the man passing between them. Everything found in the ruins had to be turned over to him by order of the Tyrant. Little enough was found. Every man had heard from generations

back of the mysterious death that lurked in the ruins. Only fools and demons went near the ruins now.

"Well?" The Tyrant stood spraddle-legged before the fire. Fear sawed at the nerves of the others who yearned but dared not move closer to the warm flames.

"This book was brought in by a soldier," The Keeper forced his voice to be firm because this was so important. "He had to take shelter during a battle with the Hill People, in a ruin. His goatskin caught on the knob of a big metal box. When he jerked it free, the door of the box opened. This frightened him because the box was battered as if he repeated poundings had not opened it...."

The Tyrant kicked a burning log.

"Read it!"

"It is called 'The Diary of Coronado Gomez,'" the words came fast lest the Tyrant refuse to listen, "The numbers 1952 appear below the name. . . ."

"Not all of it! A page here, one there."

The Keeper swallowed and began:

Page 1

Last night I am wakened from a sound sleep by Pedro's shouts. "General! General!" he calls with terrified urgency. "The atomic war! Without warning, it is here!" He is shaking a tassel of teletype streamers at me. "Look, General. What will we do? Panic will break in the streets!"

I brush the papers from under my nose. Pedro tries to speak more coherently. During the night, he says, an atomic war began between America and Russia. Each country accuses the other of dropping the first bomb, making the initial attack.

"All right, Pedro, all right," I say patiently. "Let a day or two pass before this appears in the press." His mouth drops in awe of my calm. "No need to spoil our fiesta."

"But surely, General," he sputters, with face as white as the mushrooming atomic clouds he sees in his mind. "You cannot keep this quiet!"

PEDRO thinks only of mushrooming clouds, he forgets how his atomic knowledge has rid me of the treacherous lump growing in my side. "The news will get about, Pedro, but slowly. The borders are closed. You will speak to radio and communications people."

Pedro stares at me, his whiskers trembling. I laugh. Who is he to understand radio-active cobalt? "Since you have started my day so early, do not forget the arrangement for dinner tonight. My German friends are dining with me to celebrate the fiesta. I will wear full uniform in deference to Field Marshall von Streuve, who is invited along with the scientists. But, I am forgetting the Church," I say for I cannot

resist adding to Pedro's troubles, "Invite Father Alvarez also."

Pedro bows out gnawing his mustache in anxiety. He is wondering how he will get Father Alvarez, who does not like the Nazis or me, to accept this invitation.

The Keeper of Things Found looked up hopefully, but the Tryant only scratched himself boredly. The Keeper quickly turned the pages.

Page 2

My guests arrive—all but Father Alvarez, who sends his regrets. When we are settled comfortably, I read aloud the confidential war bulletins. I shake my head with much concern. This is indeed a tragedy. Every country is rushing into the war on the side of the Americans or the Russians. Even some of our closest neighbors are offering bases and supplies.

"I must pronounce a policy of strictest neutrality," I say, "Russia and America each accuse the other of making the initial attack." I appeal to my guests, "Which am I to believe?"

My guests laugh until tears are upon their cheeks. Poor Nazis with so few pleasures and no Fuehrer. I am kind and generous to them. I offer them asylum when they escape Germany at the time of Hitler's death. Their gratitude is touching. Yes, they will help me train my army. They will call me Fuehrer. A great honor which I refuse. I ask only that they show me how to make scientific weapons and efficient soldiers. This pleases them. They are full of brains. And pride. Secretly they think Coronado Gomez is a crude simple-minded peasant. Their arrogance grows in proportion to the power of the military machine they build. They see, perhaps in the fullness of time, a new German Empire rising. But that is not what Coronado Gomez sees. . . .

This morning I am visited by a young American. He is greatly distraught. He wishes to return home. The borders are closed. All right I tell him. Return

home. Return or stay is nothing to me. either way.

But this is not all. Since his country has no diplomats here, he says with some embarrassment, he will deliver a message from me to his government.

"A message?" I ask, "Who in Washington, or wherever your government sits now, cares about a message from me?"

"Don't you realize," he cries in surprise, "what is happening? Europe is

neighbors. They are fighting each other with incendiaries and explosives. A plane strafed my border patrol by mistake. I protest. Everyone is careful thereafter. They do not want trouble with Coronado Gomez. In such a short time, my army has become the only one in the world still intact. A fine army it is and commands proper respect. Nothing is certain in the rest of the world but destruction. With China and India fighting each other, the Asiatic prob-

Look Forward to



No Charge to the Membership

By ROGER DEE

In which a galactic emissary visits a science-fiction fan, and holds his head in his hand while he makes a most interesting offer!

Coming Next Month!

being overrun by the Russian army. London, Paris, Rome, Washin—the world capitols—they're gone . . . smoking ruins . . ." he runs out of breath. "And manpower," he gasps, "there is a tremendous manpower shortage."

"Yes, too bad. And," I nod to him, "the manpower shortage will become worse. In the end the great powers will no longer be great. Still," I add philosophically, "that is the way of things."

"But," he is more agitated than ever, "we must stand together. The free world! The Americas! Can't you see what will happen otherwise?"

"The question," I agree courteously, "is an interesting one, isn't it?"

He leaves in dismay. Americans are so excitable.

I HAVE had little time for my journal of late. Neutrality brings with it many details. The war is now worldwide. It has made enemies among my

lem of overpopulation is solving itself. Ah well . . .

"Turn more pages!" snarled the Tyrant, "You love words too much."

The Keeper read hastily:

Page 32

This afternoon I am going over estimates of my stock piles. I have plenty to last until some sort of peace comes.

"Father Alvarez is here," Pedro says from the doorway, but the priest does not wait to be announced.

He strides in with his robes flowing and holds out some papers. "I have," he begins without formality, "received notification that I will be needed tomorrow because of these executions."

I glance at the papers. A list of names. Those of my German friends—all of them. Scientific and military too.

"Oh, that . . ." I pause. "We have no one of their faith here. I thought you would not mind."

"You acknowledge then," the priest demands, "your intention of murdering these men?"

"Now, Father," I soothe him. "Execution is the word. Execution for treason. They plot to kill me and set up Field Marshall von Streuve as their new Fuehrer."

He gazes at me silently whispering something to himself. Then his voice becomes accusing. "You intended all along to murder these Germans. You brought them here. They trained your peasant army. They built you an atomic bomb. One atomic bomb! You sent out a plane and dropped that bomb. Was it on Washington or Moscow? It didn't matter which, did it?"

Father Alvarez is smarter than most men and considerably bolder.

"You knew," he goes on, "there'd be no questions asked. That first atomic bomb spelled war no matter where it fell. I am going to publish the story of these men," he slaps the execution lists fiercely. "I am going to broadcast it everywhere until the whole world knows that you alone are responsible for this holocaust."

I speak to him kindly. After all, not

he nor anyone else can stop the war now. "No restraint will be placed upon you. But why do you bother? Soon it will all be over—no one will be left but us. "I console him." I will build you a nice little Vatican of your own." He turns away and is gone. A troubled man.

He does not matter. No one matters now. Coronado Gomez has succeeded where Caesar, Napoleon, Hitler and the others failed. Coronado Gomez has made himself Dictator of the World!

The Tyrant's voice rose. "This book contains nothing. You have your orders! Find out how these earlier people were able to move carts without using oxen. With such knowledge I will annihilate the Hill People! I will rule the world! And," his great fist sought out the lump on the Keeper's chest, "when I do," he laughed loudly as the blow landed, "There'll be no more of this senseless reading."

Painfully doubled over and wishing for death, the Keeper crept toward the door. But the Tyrant's good humor was so contagious the two soldiers clouted the Keeper heartily, and he lay still upon the ground.



Curt Temple pits his slim Earth knowledge against the most perfect intelligence in the cosmos to save the world—and the woman he loves. Be sure to read THE GODS HATE KANSAS, a novel by JOSEPH J. MILLARD in November

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SHOW ME THE WAY TO GO HOME

By Gordon R. Dickson

*Hey diddle diddle, the cat
and the Cuperians....*

COME, come," said Kris Iliis, "Cheer up, Meki."

"I can't," groaned Meki Ton.

"Have some of this pressed duck and Napoleon brandy; there's a good fella. It'll make you feel better."

"No thanks, Kris," said Meki, hollowly. "It would choke me."

The two Cuperians were seated in the palatial living room of the Princess suite at Chateau Hotel in Miami. Luxury surrounded them. A feast fit for a king was laid out on the table in front of them; but they were doing it poor justice. This, however, was not surprising. They had been on Earth for two weeks now and the strain was telling on them.

"Buried," groaned Meki. "Buried alive.

Oh, these stupid humans."

Kris Ilis looked anxiously at his friend, knitting his black brows worriedly. They looked remarkably alike, these two—but then Cuperians always do, conforming to a general type which is tall, brunette and Mongoloid in appearance—but to anyone experienced in Cuperian physiognomy it would have been apparent immediately that Kris was the older and more responsible of the two.

"Look," he said soothingly, "Why don't you go tell it to the cat."

"That stupid animal!" said Meki bitterly. "It'll never understand. I've been trying to get the situation through its thick skull for five days now."

"Try again," urged Kris. "It may be stupid, but it's our strongest hope right now."

"The trouble with it," said Meki, "is that it hasn't any sense of social responsibility." He sighed. "Oh, well. Come here, cat."

A FINE blue persian, which had been napping on the cloth of gold bedspread in the master bedroom came strolling in through the door in response to Meki's telepathic command. It sauntered to a position on the carpet facing the two men and sat down.

"I'm here," said the cat. Kris looked over at Meki with a slight expression of surprise.

"Oh, you've taught it to talk?" he said.

"Yes," sighed Meki. "I had a wild hope that it might get to gossiping with the bellboy or something like that. But it can't seem to grasp the concept of talking for the pleasure of it."

"Oh," said Kris, "Well, go ahead." Meki nodded and turned to the cat.

"Now, pay attention," he commanded sternly. "Who are you?"

"I'm here," said the cat.

"I know you're here, you pea-brained idiot!" yelled Meki. "I asked who you were."

"Gently, gently," remonstrated Kris.

"Well, who are you?"

"Cat," said the cat.

"And who am I?"

"Nice," said the cat.

"I am not nice," roared Meki. "I'm Meki. I'm one of the evil Cuperians that's going to blow the world up and destroy all the fish and pour all the cream down the sewers. Now, who am I?"

"Meki," said the cat. Meki mopped his brow with relief.

"And who is he?"

"Kris."

"Good, good," said Meki. "Is he an evil Cuperian, too?"

"Yes," said the cat. Broad smiles broke out on the faces of the two Cuperians. They leaned forward hopefully.

"Now," said Meki, "think carefully. How did we get here?"

"Your ship crashlanded," said the cat. "And both of you had been conditioned never to let inferior creatures like humans know of the presence of superior creatures like evil yous. So you automatically buried the ship and hid all traces, and have been waiting here for someone to rescue you. There are more yous out on the moon, but they don't know you're in trouble because you have no way to signal them. But if people knew you were evil Cuperians—Cuperians—Cuperians—"

"—then the scanning station—" prompted Meki.

"—then the scanning station with their psych scanners would notice it and investigate, and find you and take you away. The scanning station can't find you now because it is set for human minds. So all you can do is let the humans find out, but you can't let humans find out because you are conditioned not to let humans find out. But—" finished up the cat, "I'm not an intelligent creature, so you can tell me."

"Fine, fine," said Meki. "Now, don't you think you should do something about it?"

The cat looked at him blankly.

"Idiot!" exploded Meki, suddenly.

"I'm telling you to—to—" He choked off suddenly, vocal cords straining, face turning a bright crimson in his unsuccessful attempt to force the forbidden order to betray their presence past his conditioned block.

"Relax," said Kris, patting his friend on the shoulder. "If the creature can't understand, it can't understand."

"I'm hungry," said the cat.

With a furious gesture, Mekl swept his plate of pressed duck onto the floor in front of it.

"Here!" he bellowed. "Eat; stuff yourself! Choke! Ungrateful beast!"

"Not ungrateful beast," said the cat gravely. "Hungry beast."

"Oh, go away," said Mekl, despairingly, and the cat, much to its own disgust, turned obediently away from the pressed duck and trotted into the bedroom. There it meowed piteously until Mekl wearily remembered himself and carried the pressed duck in to it.

I REALLY don't know," said Mekl, sadly, coming back from the bedroom, "We've tried just about every way conceivable to attract attention."

"Did the hotel manager get in touch with you about the bill we've been running up here?"

"Oh, yes," sighed Mekl, "my reflexes took over and I talked him out of it. He ended by suggesting we stay here permanently. I can't take it, I tell you!" he added, wildly. "I'll develop paranoid tendencies, see if I don't!"

"Come now!" said Kris, shocked. "We've been in some tough spots before this. Remember the ice fields of Urana, or the lava prospecting on Drusus."

"But that," said Mekl, his voice cracking, "that was plain ordinary hardship. It's this insane barbaric opulence. I ask for a glass of cold water and they give me a glass of warm water with chunks of frozen water in it—" his voice rose to a scream. "Isn't that funny? Isn't that ridiculous? Ha-ha-ha—" and he went off into a shriek of hysterical laughter.

"Meki!" roared Kris.

"Not cold water," screamed Mekl, "half-cold, half warm. Tricky, eh? Clever, eh? Ha-ha-ha-ha—"

Kris slapped him, sobering him up.

"Now, that's better," said Kris, as Mekl buried his nose in the Napoleon brandy. "Keep your chin up. I've got the feeling that cat will be the saving of us yet. Meanwhile, we'll do what we can."

"If I ever get out of this," said Mekl fervently, "I swear I'll never go prospecting again."

"And I, too," said Kris. "However, let's get down to ways and means. What all have we tried so far? We started a fire—"

"And they arrested that little old lady on our recommendation," said Mekl.

"We robbed a bank—"

"The morning paper says the police are baffled."

"And we called on that scientist—what's-his-name?"

"Luodemann," said Mekl. "The one who was preparing a report on ten years of work to prove the existence of extraterrestrial life."

"Oh, yes," sighed Kris glumly. "He shot himself when we proved logically that he was wrong. But—" he said, brightening — "there's something you don't know about. I sent in a fake income tax return under your name."

"I know," said Mekl. "I spied on you, stole the return back from the mailman and burned it."

"Oh," said Kris. There was a moment of bitter silence. Suddenly however, he sprang from his chair, jubilantly.

"I've got it," he cried. "Let's take the cat and go get drunk and get picked up by the police. One of us is bound to babble."

Meki's face lit up.

"The very thing!" he echoed. "Here, cat!"

The cat came running eagerly into the room. Mekl picked him up.

"Come on, boy," said Mekl, jubilantly. "We're going to paint the town red."

ARMING themselves with a good supply of the money stolen from the bank, they hurried out of the hotel and hunted up the worst section of town. It was a dirty, dingy saloon below street level where a slovenly bartender lazily flicked flies from the glasses with his bar-towel. The three comrades lined up at the bar, the cat on top of it.

"Gimme a shot," said Meki.

"Gimme a shot," said Kris.

"Gimme a shot," said the cat.

The bartender stared at the cat.

"A talking cat?" he said incredulously.

Meki's face lit up. But Kris' reflexes had already taken over and the words flowed in a smooth stream from his mouth.

"Of course, naturally," he said cheerfully to the bartender. "You've heard of this play, Harvey; where the hero has an invisible rabbit, or Pooka. Well, Pookas may be invisible, but cats are not. You've certainly seen cats before. And this is a persian cat. If a Pooka can talk, so can a persian. Of course—" he leaned across the bar and shook the bartender warmly by the hand. "Of course, I knew you'd understand. As I said to my friend, bartenders aren't surprised by anything. And you aren't. Hah! Hah!" and he laughed heartily.

"Hah, hah," echoed the bartender weakly, not sure whether this was a joke or not. And then Meki, much to his own disgust, found words forcing themselves past his lips.

"My friend," he said confidentially, leaning over the bar, "is a ventriloquist."

"Oh," said the bartender, relieved.

"Gimme another," said the cat.

"Heh, heh," said the bartender, pouring another shotglass full for the cat. "Cute little devil, isn't he?"

"Er-yes," said the two Cuperians, watching in some surprise as the cat tossed off his second shot glass with flying tongue and shoved it forward for a refill. For the first time a sinking sensation made itself felt in the breasts

of Meki and Kris.

"You know," said the former, voicing this in a whisper in the latter's ear. "Maybe it would have been just as smart to leave him at home."

Meki's fears were only too well founded, the next couple of hours disclosed. At the end of that time the two Cuperians, drink as they might, were only slightly high; but the cat, owing to its smaller blood content, was roaring drunk. It staggered down the bar, caterwauling happily.

"Shh," said Meki, nervously, grabbing it by the shoulder.

"Lemme go," said the cat, making an ineffectual swipe at him with one paw, "I can lick any tom in the room."

"But," pointed out Kris, "there aren't any toms in the room here."

"Then lesh go find some," said the cat, embracing him. "I don't want to fight you. You're my buddies. You're the nicest, most evil Cup-Cuperians in the world."

The faces of Kris and Meki lit up, but a split second later their reflexes had taken over and they were holding the cat's jaws firmly closed.

"What did he call you guya?" asked the bartender, suspiciously.

"Canarians," said Kris, glibly. "From the Canary Islands, you know."

"Oh," said the bartender, and they carried the struggling feline outside.

"Damn it!" said Meki. "If we'd only been able to stay there, maybe the cat would have talked some more."

"Well, there's other bars," Kris pointed out reasonably. "Suppose we try one down the line here a way."

THE other bars, however, proved to be pretty much of a repetition of the first. That is to say, they would have a few drinks, the cat would start talking, and at the first suspicious word, they would find themselves hustling it outside. To top all this off, the cat passed out in the fifteenth bar and could not be persuaded to say another word. The two Cuperians sat in dispirited silence in the

last bar, a small cosy place by the name of Louie's Nite Club and gloomed at their drinks. That is to say, they gloomed until Meki was suddenly struck with the bright side of the matter.

"Say," he said, happily, making a grab for his glass and missing. "Kris, I do believe I'm getting a little drunk."

"Well, I'll be flipped," said Kris, trying to focus on his glass which seemed to be doing a sort of geometric dance with four or five hazy duplicates of itself. "I think I am a little that way myself."

"Of course," said Meki, closing one eye slyly, "we aren't really drunk. Not us Cuperians on this weak human liquor. But maybe we're just a little bit high enough to get by. Do you suppose we're drunk enough to be picked up by the police."

"Could be," agreed Kris. "Let's go find out."

"Let's," said Meki. "But first, let's take a little nap."

"Good idea," said Kris. "Just the thing. Good night."

But Meki, his head down on his arms, was already snoring; and Kris, with a tolerant smile at the younger Cuperian's ability to hold his alcohol, lost no time in following his example.

He woke up later—but after that things got hazy.

Kris returned to consciousness because Meki was shaking him. Through bleared and aching eyes, he looked around him. Five inches in front of his nose was a cement wall on which somebody had scrawled in pencil:

*"Stone walls do not a prison make,
Nor iron bars a cage."*

He pondered this for a few seconds, becoming conscious of an aching head and the fact that he appeared to be lying on some rather hard surface. Finally, deciding the matter was worth investigating, he rolled over to discover the fact that he was in a cell and that Meki was standing over him, excitedly waving a newspaper.

"Wake up!" Meki was shouting. "That cat has got us in a fine mess." He shoved the newspaper into Kris' hands and indicated an article on the front page. "I hypnotised the jailer into getting me a copy of the morning paper. Read what it says about us."

Kris groaned, sat up, and focused with difficulty on the item indicated:

MANIACS PLEAD CAT AS ONLY DEFENSE

Kris' eyebrows shot up in surprise. He read on:

"Two maniacs were taken into custody this morning after a drunken debauch with a cat leading through a number of bars. Bartender Otto Bikonsky at the Blue Point Bar called police when the maniacs ran out of money and insisted that the cat write a check for further funds. When the cat made no move to do so, a loud argument ensued, climaxed by the arrival of the police. Upon being taken to Headquarters, the maniacs refused to furnish any information about themselves, referring all questions to the cat and stating loudly that since it (the cat) had gotten them into this, it was up to the cat to get them out. To date the cat has refused to utter a word and a sanity hearing is scheduled before Judge Custer P. Polk, affectionately known in courthouse circles as 'Committin' Custer.' A careful check of city banks today revealed that the cat possesses no checking account."

"Well?" said Kris, looking painfully up at Meki.

"Kris," said Meki, shaking him. "For Snark's sake, Kris, I'm frightened. You see what it says—maniacs. Kris, maybe they're right. Maybe we are going insane. Remember those two just like us that got marooned on Kathol? When the survey station found them they were already in an insane asylum and so badly infected they had to be left there. Remember?"

Kris shuddered.

"I hadn't thought of that," he said.

"Kris, we've got to get out of here."

"All right, all right," said Kris, supporting his aching head. He took a minute to sort out his thoughts and then sent out a mental call.

SOME seconds elapsed, and then a portly individual in an olive-drab uniform came waddling down the corridor between the cells. He stopped before their door and stared at them glassily.

"Well, open it up!" snapped Meki, impatiently. The portly individual stared, shook himself, produced a key and unlocked the door.

"Now, show us the way out," said Kris. Automaton-like, the jailer preceded them up the corridor, ran headlong into a steel door and knocked himself out.

"Now isn't that just like a human?" said Meki in deep disgust. "Can't think for themselves at all under hypnosis. Now, how are we going to get through the door?"

"It doesn't seem to be locked," said Kris, pushing at it cautiously. It yawned open and they stepped through into a room containing a high desk and several uniformed individuals in various poses of relaxation.

"Jailbreak!" yelped one, whipping out his gun. He stared at it in surprise and then began to suck childishly on the barrel. The others smiled and nodded and indicated a door in the far wall.

They went through the door into another corridor, down an eleborator and out of the building. They went back to the Princess suite at their hotel, and opened the door.

The cat, uttering glad cries, flung itself into their arms....

"Now what?" asked Kris morosely, when they had finished a light but nourishing snack of crepes suzettes and opened a jereboam of champagne.

"I ran away," said the cat, proudly.

"We know!" snapped Meki. "You've told us fifteen times already."

"I didn't say a word," added the cat, preening itself.

"Thanks," said Kris, sourly. He

poured some champagne into a coffee cup. "Drink that and keep quiet."

The cat lapped happily. Kris turned back to Meki.

"Now what?" he repeated.

"Kris," said Meki, desperately. "We can't waste any more time. I can feel paranoic tendencies nibbling at my sanity right now. Varve yourself and see if you don't notice the same thing."

Kris did, and shuddered.

"You're right," he said. "That foolish business of getting drunk speeded up the process."

"Listen, Kris," said Meki. "We've got to signal the moon direct."

"But how?" protested Kris. "All they've got on this godforsaken planet is radar, and I don't know a thing about that. And an operation as delicate as that can't be handled by direct hypnosis."

Meki groaned.

"Oh, why didn't I study my ancient sciences like Professor Smrgi wanted me to. If he said it once, he said it a hundred times, 'Meki, you never know when it may come in handy to be able to make a catapult or to levitate yourself.' And I just laughed. If I can just get out of this, I'll make it a point to go back and apologize."

"I've got it," said Kris, snapping his fingers. "How about a large mirror? We could flash them a message in interstellar code."

Meki grimaced sourly.

"It's a penal offense to make backward natives work for you," he said.

"I know," said Kris, solemnly. "But think which you prefer. Fifty years at hard labor or an indefinite stay—maybe a permanent stay, if we become mentally infected—on Earth."

The alternatives were only too clear. Meki faced up to them like the Cuprian he was. He shook hands solemnly with Kris.

"We'll do it," he said.

"I'll help," said the cat.

"Oh, no you don't," said Meki, swiftly. "We don't want you balling up the

works again. Kris, what can we do with him?"

Kris thought.

"I've got an idea," he said. He turned to the cat. "How would you like to learn to read?"

"Read?" repeated the cat.

"You'd love it," said Meki, heartily. "Everybody does when they first learn how. Kris, you teach him while I order up some material." He picked up the phone and put in a call to the cigar counter in the lobby for all the blood-and-thunder they had in the way of pocket books and magazines. By the time a bellboy came staggering up with an armload of these articles, Kris, with the aid of the morning newspaper had rendered the cat semi-literate.

"You'll pick up more words as you go along," Kris informed the cat, as he and Meki left the feline surrounded by garish covers. "Oh, one other thing—you've seen Meki and I answer the phone?"

The cat nodded.

"Well, you know how it's done. If anybody should call while we're gone, you tell them we've left town and take a message. Got it?"

"Yes," answered the cat.

"Good," said Kris, and they went out.

AFTER driving around in a taxi for some time, they decided that the best thing would not be one big mirror, but innumerable smaller mirrors, mounted on all the rooftops in town and operated in unison. Accordingly, they got out of their taxi in a central portion of town and sent out a mental call.

Immediately, all through the business section, normal activity ceased. The butcher, the baker, the candlestick maker (the president of Waxies, Inc., that is, who happened to be vacationing in town at the time) to say nothing of innumerable other people in all sorts of trades and professions, immediately felt a sudden distaste for their usual functions and a corresponding overwhelming urge to rush up on the rooftop of what-

ever building they happened to be in and construct mirrors. Cheering and laughing happily, they threw away their typewriters, adding machines, stethoscopes, and monkey wrenches, tore down all sorts of reflecting surfaces and went scurrying up stairs and out onto shingles, eaves, or tiles. Within a certain rough circle of area, the town took on an air of carefree holiday and festival, while outside that area people pointedly ignored what was going on within—unless, that is, they happened by accident to cross the boundary line, in which case they were struck by the industrious madness that went on around them.

"Very good," said Meki, to Kris, watching a bank executive smash a store window and take out a large dressing room mirror, while the proprietor of the store cheered happily. "But I wish they'd hurry. I'm beginning to get a funny feeling."

Kris mopped the perspiration from his brow.

"I must be out of shape," he said. "I'm having a rough time handling these people. Are you sure you're doing your share?" He looked suspiciously at Meki.

"My share?" muttered Meki, avoiding his eye. "Me? Certainly? Why not? But why? Why—"

"Meki!" cried Kris, staring at his friend. "Snap out of it. What's wrong with you?"

"Me?" answered Meki, in an odd tone. "Nothing. Nothing could be wrong with me. But—" he suddenly clutched at Kris's sleeve.

"Look!" he hissed. "That little man, over there. He's staring at me."

"Nonsense," said Kris, trying to disengage himself. "He isn't even looking at you."

"He is. He was," said Meki wildly. "But you won't admit it. You're all against me. All of you. But I'll beat you yet. You want to take me back to Cuper for psycho-conditioning. But I won't let you." And, under the sudden surge of Meki's mind, little bodies of men around the town began pulling

down their mirrors and getting into fights with others who were still putting theirs up.

Kris fell back, the horror of realization printed on his face. They had delayed too long. Meki was already mentally infected. That meant that he with his only slightly higher stability rating had only a matter of minutes left. The scanning station personnel would have to reach them in less than six hours in order to save them. After that the damage of infection would be beyond repair. There must be some way to get through to the station in time. In a last surge of desperate effort, his mind sought for an answer—and found it....

LEAVING Meki madly engaged in tearing down what they had built, he groped his way to the nearest telephone. And as his mind sunk into insanity, the last thing he remembered was his voice babbling desperately into the mouthpiece.

He awoke to the blissful peace of the infirmary in the scanning station. An orderly was bending over him.

"Am I—" he croaked.

"You'll be all right," said the orderly, his kindly Cuperian face beaming down on him. "How do you feel? Want another shot of nerve-titillator?"

"No thanks," sighed Kris, relaxing. "Meki?"

"He's all right, too," said the orderly. "And the cat sends you his love. We offered to take him off Earth with you two, but he preferred to stay with the humans he was used to. Affecting scene at the end, there, though. He took my hand in both paws and shook it with tears in his eyes."

"Did he?" said Kris, feeling, despite himself, a little touched. "Tell me, what happened?"

"Well, according to what he told me, you didn't make too much sense over the phone. But as you surmised, there

had been all sorts of noble heroes in those books and magazines he had been reading, so that when you told him that the city was doomed to be destroyed by invading Cuperians, but that he could save himself, he bravely decided to stick by his guns and warn Washington.

"He immediately made a long distance call to the FBI and informed them of the situation, insisting that he be put through to the President. I gather they gave him a rough time, but knuckled under when they found where the call was coming from. I guess they figured anyone with enough money to rent the Princess suite deserved to be listened to for a minute or two. The upshot of it was that the cat spoke to the President and told him off rather sharply about the inadequacy of the space-warning set-up in that area of the country. At any rate it was enough to make the FBI start a routine investigation, and of course our scanners picked it up at once and deducted your presence."

"And—" ventured Kris, hesitantly, "—the mirrors?"

"What mirrors?" asked the orderly. "You were both babbling about them, but we didn't see anything out of the ordinary about the mirrors where you were."

"Never mind," said Kris, happily, relaxing. "Just a hallucination I guess. Ah, it'll be good to get back to Cuper."

"To Cuper?" said the orderly, surprised. "Oh, I forgot you didn't know. It's been decided to raise Earth to interstellar apprenticeship level, and all citizens having any knowledge of the planet have been requisitioned for work in the human cities—with adequate mental shields, of course. For you and Meki it'll be quite familiar territory, won't it?"

There was a long moment of silence.

"I think I'll take that shot of nerve-titillator after all," said Kris, in a dull voice. "Better make it a double."

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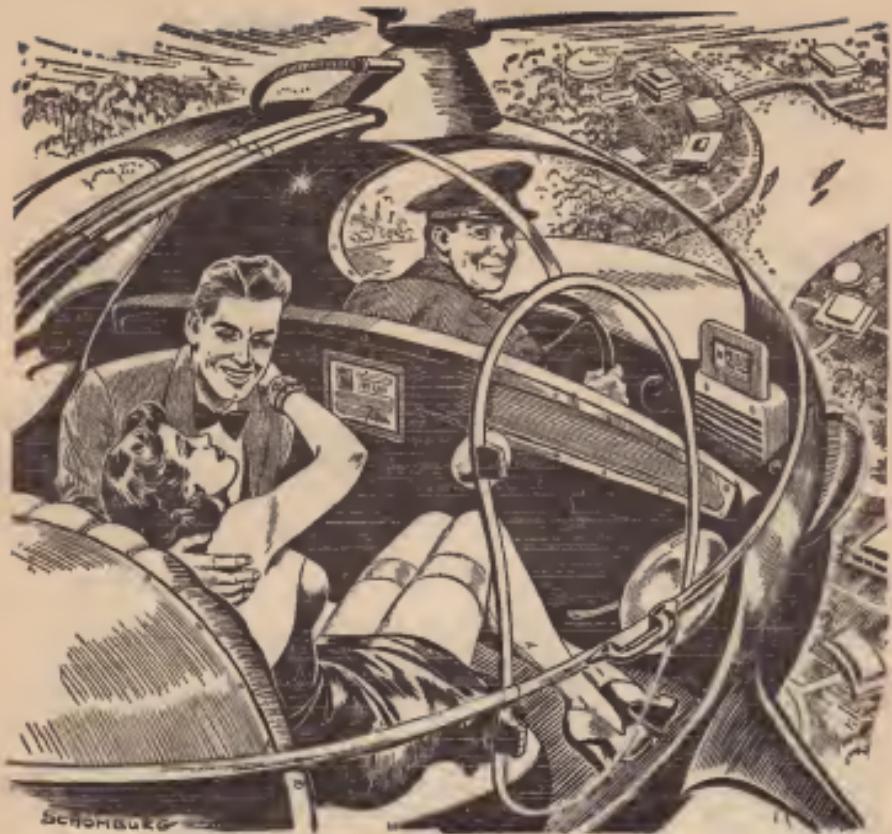
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SCHOMBURG

Jeff awarded himself a day off and took Mona around the city

I

THE Solar Visicasting System owned land and occupied its own building on the Avenue of the Planets in Nuyork. The Visibuilding, as it was known, was one hundred and seventy storeys of imposing steel, stone and glass, terraced and scalloped in the most modern design. In it were the five hundred huge studios in which SVS produced the shows which were visicast through its thousands of affiliates all over Terra and, since they

had built hundreds of coaxial satellites, throughout the Galactic Federation. There were thirty storeys filled with clerical help, script girls, page boys and the stenographers' pool. There were forty storeys of executives—the higher you went the more important the executive, culminating finally in the private office of the president of the network, which occupied the entire 170th floor.

In studio 100-C, they were rehearsing

He Had a Galaxy Full of Prospective Customers



LOVE THAT AIR!

a novelet by

KENDELL FOSTER CROSSEN

the Galaxy Gaieties. They were doing a costume piece on the musical, and in one corner of the studio they'd built a field, complete with babbling brook, towering trees, and such scarce Terran animals as horses and cows. The rehearsal was temporarily at a standstill while the director argued with a representative of Nojul, Ransome, Denning and Eeee, the advertising agency. The latter claimed that the makeup on one of the cows didn't

look authentic, while the director was patiently explaining they'd used the best research man in the business.

Jeff Reynolds had taken advantage of the lull to make a date for lunch with Mona Parker, the beautiful star. Having accomplished this, he blew her a kiss and started to leave. The director saw him.

"Jeff, boy," he called. "You like?"

"What's your rating?" Jeff asked.

"Two thousand fifty-four on the Beel-

But He Had Only One Product to Sell—Himself!

son Rating. Two thousand fifty-three on the Stooper."

"Then I like," Jeff replied. "I love. I adore. And you're a sweetheart."

"I love you, boy," the director said and went back to his argument with the advertising representative of Fleet Chairs—"Treat Your Seat to a Fleet"—who sponsored the show.

Jeff left the studio and entered the Level Converter. As he stepped in, he noticed a small, handsome man heading energetically for the studio. He was Guy dolla Moran, vice president in charge of network programs. Although there were plenty of official reasons why he might visit the studio, Jeff knew that he was going to ask for a luncheon date with Mona Parker. He grinned to himself, imagining the expression on the vice president's face on being turned down.

After a varied career as writer and director, Jeff Reynolds was the supervisor for night-time visicasts for SVS. The next step up, if he could make it, was a vice presidency. It was generally agreed in the industry that Jeff was a young man who was going places.

He always drank Martian whisky on the rocks, bought all his clothes at Tookes Brothers, and said the things that were expected of rising young executives. The only thing that might mar his prospects was that Guy dolla Moran was his immediate superior and they were both interested in the same girl. But Jeff was confident of the outcome. He knew that Mona also went out with dolla Moran, but he was sure that she was merely being politic. And he was equally certain that dolla Moran would accept the whole thing with good grace when he realized that the best man had won. Jeffry was also well aware that the president of SVS, Matthew Anderson*,

thought highly of him and this was an important factor.

UPSTAIRS, Jeff had to see one of their regular writers whose latest script he was rejecting. The writer listened in bewilderment while Jeff told the latest funny story and then explained that he didn't like the story.

"I didn't feel it in here," he said, thumping his chest, when the writer demanded to know why he didn't like it. "I love you, sweetheart, but you've got to hit me."

Looking as if he'd like to, the writer picked up his script and departed. Keeping a close eye on the time, Jeff saw three more writers. One he told that they all loved his script and they only wanted a few changes; if he'd rewrite the lead character, change the motivation, and give it a new ending, they'd buy it. The second writer wanted an increase in his rate and was treated to a long story of how production costs were going up. The third one was a new writer they were considering for a new show and Jeff raved over every idea they discussed, although he privately concluded the fellow was a troublemaker. He wanted to introduce too many new, untried ideas.

After the session with writers, Jeff dropped in on two producers and a stage designer and went over plans for shows coming up the next day. Then he just had time to dash to the conference room for a general discussion of the new script on their biggest dramatic show. Guy dolla Moran, John Leeds, the script editor, Al Lemster, the director, and Veno Harrison, the writer, were already there waiting for him. He noticed that dolla Moran looked less friendly than usual.

As they always did at these conferences, the rest of them relaxed in various poses and prepared to hear Guy dolla Moran read the script aloud. There had been a time when the vice president had considered himself an actor and he read scripts with considerable feeling.

He read the first line of the script and

*Matthew Anderson, only a few years older than Jeff, was considered the top man in Advertising circles. His nomination stemmed from the class wheel, as a mere vice-president, his influence caused the election laws of Beta Hydril to be changed. Since that time, the president of Beta Hydril is the man who receives the most beatings (from Wheatsley's Teasted Corn Popas, of course) from the visicaster audience. Only those persons involving a visicaster can be eligible to vote. Whenever advertising or visicasting men get to talking shop over their Martini-whisky-on-the-rocks sooner or later this conversation will get around to the sheer genius of Matthew Anderson.

leaned back, closing his eyes. "I'm seeing it," he explained. He always offered the same explanation, but as the rest of them were also in some stage of seeing or feeling it, they paid no attention.

"Good," he said after a moment of silence. "Am I right, boys?" The others quickly agreed.

The reading of the script went fine for six or seven pages, but then dolla Moran read a line and when he'd finished seeing it he was frowning.

"No, Veno," he said, shaking his head. "My mother wouldn't understand that line. Am I right, boys?"

There was total agreement from all ex-

place, Veno. After all, I'm not a writer." He continued with the reading. At the end of the script there were only some three hundred lines that needed rewriting and everyone was agreed that they had a good script.

Jeff Reynolds rushed off to a meeting with the network censor and they managed to cut offensive things from ten shows before lunch time.

Mona Parker was waiting by the studio door when Jeff arrived. Downstairs, they grabbed a helicab and went to the Venusian Haven for lunch. The food there was good, the tables nicely secluded, and there would be sure to be one

Brethren of the Ulcer

ONE of Ken Crossen's most popular stories was the inimitable THINGS OF DISTINCTION (SS, March 1952) in which he performed a wicked bit of vivisection upon galactic hucksters. Carrying on the tradition, Mr. Crossen returns to the fray with a new dose of insecticide for the advertising moguls—the brethren of the ulcer. Some of the characters you've met before appear briefly herein, though it is not actually a sequel to THINGS OF DISTINCTION. It is fun though, with many a sage bit of thinking concealed beneath the gimmicks and gags.

—The Editor

cept the writer. "I don't get you," he said. "What kind of a criticism is that? We got an audience of twenty-seven billion on this show. Who's writing for your mother?"

Four pairs of eyes stared reproachfully at him.

"You don't understand, Veno," Jeff said gently. He'd been a writer himself and he understood them. "If Guy's mother wouldn't understand it, then it's got to go. I've met Guy's mother and let me tell you she's a very unusual woman."

"She'd have to be to have produced him," the writer muttered. But he said it so low that only John Leeds heard him and he managed to turn his snicker into a cough.

"Then we're agreed," Guy dolla Moran said, marking the script with his blue pencil. "You'll think up something in its

or two visigossips there who would report them as an item on the next visitcast.

After a couple of drinks and a leisurely lunch of Sabikian pheasant, Jeff proposed for the twenty-seventh time. And for the twenty-seventh time, Mona said maybe.

"Of course, I love you," she said, "but I've got to think of my career. If I were to marry you now, Guy would be furious. He might even convince the sponsor that they should get a new star for the show. But if you get to be a vice president, he wouldn't dare to fire me then."

"And if I don't get to be a vice president, you might marry him. Is that it?"

"A girl could do worse," Mona said. She reached over and patted his hand. "But even if I married him, I'd still love you. You know that, dear."

"Of course, dear," he said bitterly. "Come on. We'd better get back to the shop. It's the early bird that catches the vice president."

"Don't you mean that catches the worm," Mona said doubtfully.

"Same thing," Jeff snapped. He signed the check and they went out and took a helicab back to SVS.

"Will I see you tonight?" he asked as they reached the door of her rehearsal studio.

"I don't know," she said. "Check with me later, will you, darling?"

"You mean if dolla Moran doesn't ask you, then you'll go with me? I had a date with you last night, so it's his turn tonight if he wants you. Is that the idea?"

"Don't be dreary," she said coldly. "I'm free, Terran and twenty-one."

"Plus," he said savagely and headed for the Level Converter.

II

WHEN he reached his office, there was a facsimile-memo on his desk asking him to go to the president's office as soon as he returned from lunch. He left a videotape for his secretary and took the Level Converter to the top floor.

He stepped off the Converter into the small office of Anderson's secretary. She gave him a friendly smile and waved him on through the door that was marked private.

With the exception of the small cubicle for the secretary, the entire top floor was given over to the private office of Matthew Anderson. He was looked upon as a creative executive, and the decor was planned accordingly. His desk was, naturally, at the far end of the floor. A conveyer belt, made to resemble an old-fashioned cobblestone walk, ran from the doorway to his desk, winding through a pleasant little woodland, at one point arching over a small stream. Artificial birds, perched in the artificial trees, occasionally chirped excerpts from popular opera.

The ceiling of the office was at least

two hundred feet above the floor. Altairan artists had created small clouds to float about near the ceiling and there was a control panel under Anderson's desk so that he could make a small amount of rain fall over the forest. Above the clouds there was a miniature Solar System, with the planets wheeling about the sun in the proper fashion. A concealed spotlight constantly played on the third planet in the tiny system.

Nearer to the desk, there was a well-stocked bar, with two bartenders in constant attendance. Since the bartenders were Algolians, who cannot hear any sound below the supersonic level, their presence was no threat to office secrets.

Jeff Reynolds was still sulking over Mona, so he ignored the conveyer and walked across the office to the desk. By the time he arrived, some fifteen minutes later, he was in better humor, although it was not helped by seeing Guy dolla Moran seated beside the president's desk.

"Jeff, boy," Anderson said warmly. "How's it going, boy?"

"Great," Jeff said.

"It always goes all right with Jeff," Guy dolla Moran put in. "He's a sweetheart, that boy."

"I love you, Guy," Jeff said automatically as he dropped into a chair.

The president of SVS beamed at his two assistants. "Jeff, we've just been talking about you," he said.

"It's not true," Jeff said in mock horror. "I am dentalized by Tothsavers, I'm always up in the air with Mummer, I treat my seat to a Fleet, my best friends do tell me that I need a Ransome Halo, and I was seduced by the sponsor's maiden aunt on a Lover's Carpet."

The last was a reference to the J. C. Lover Carpet Trust, whose slogan was "Nobody can resist a Lover's carpet," and the other two men dutifully laughed at the familiar office joke.

"The thing is," said Anderson, "we got a problem. A toughie. Guy and I were talking it over and he said you were just the boy to solve it. You know, I think he

was right about you after all."

"It just shows," Jeff said, "that the Denebian cannibal was right when he said you can't keep a vice president down. They'll always come up with some kind of an idea." He was suspicious of any recommendations from Guy dolls Moran.

"Love that boy," Guy said lightly.

"Now this is just off the cuff," Anderson said, "but you can pick up the details later. Our trouble is on Acamar Two. It's a Class C planet and trade agreements were signed a little over a year ago. We were on the ball right away and made our usual arrangements. We put up half the money for Acamarans to build their own visitations. Our usual contract, with them agreeing to carry a reasonable percentage of our shows. Guy, how many affiliates do we have on Acamar Two now?"

"One hundred and one, Matt."

"One hundred and one affiliates," Anderson said, "and they're not carrying a single commercial show off the network at present."

"How come?" Jeff asked.

"That's the problem, boy. Glad to see you getting right to the core of it. They're carrying enough sustaining shows so we can't accuse them of breaking the contract, but the minute we sell a show, they drop it and pick up another sustainer. I don't have to tell you that our sponsors are all raising hell over the thing."

"Even the sustainers draw a small audience," the vice president said. "Am I right, Matt?"

"Right, Guy. They're fighting us."

"If they didn't have visicasting before," Jeff said, "maybe they just haven't accepted the medium yet."

"Wrong track, boy," Anderson said. "They took to it like a rocket takes to space. In addition to our affiliate stations, there's something like a hundred independents. They got big ratings, everyone of them. There are close to a billion visisets on the planet."

"Commercial resistance?" Jeff asked.

THE President shook his head. "They carry plenty of commercials on the independents, all native products. And I've seen reports showing that the native products have increased their sales three hundred per cent since they started using visicasting. But they won't listen to our advertising. Most of our sponsors have opened branches on Acamar and they're selling nothing. A great big doughnut. It's serious, boy."

"Rugged," Jeff agreed. It hardly sounded like a job for him, but if Anderson had been convinced that it was there wasn't much he could do about it.

"So far," Anderson continued, "we've been protected against the advertisers trying to make deals directly with the Acamaran independent stations because there's a Federation law against it. But we've just learned that the Planetary Association of Manufacturers is bringing pressure on the Congress to repeal the law. We've got to work fast."

Jeff nodded, still not sure what they were driving at.

"Well, it's all yours, boy," Anderson said. "Clean this one up and you'll be solid. There might even be a little promotion."

"Wait a minute," Jeff said. "Just what is it you want me to do?"

"Clean it up," Anderson snapped. "Straighten them out so they start using our commercial shows. My secretary's already made a reservation for you on an afternoon flight. She'll tell you what time you're leaving. See her on anything else. Get on the ball, boy."

"Who's in charge in our Acamaran office?" Jeff asked.

"An Acamaran. I think his name is Tokka. He's vice president in charge of Acamar, but you'll be in charge when you get there. I've already dictated a videotape on it."

"Tokka? Is that his first or last name?"

The president looked at the vice president and the latter responded. "I think," he said, "that Acamarans have only one name."

"What kind of life on Acamar?" Jeff asked.

"What kind of life?" repeated Anderson. He seemed to be losing his patience. "The kind of life that won't buy our commercial shows, that's the kind. Don't bother me with details, Jeff, boy. Nobody ever got anywhere by standing around asking questions."

"Jeff'll take care of it," Guy dolla Moran said. "Am I right, lover boy?"

"When were you ever wrong?" Jeff returned, being careful to keep any suggestion of irony out of his voice. He turned and trudged back through the artificial forest.

Anderson's secretary handed him his reservation on the Pan-Galactic Spaceways and told him that his ship took off at four that afternoon. He had about an hour to make it. She told him that she'd also made a reservation for him at the Bahari Hotel in Azoi City, the capital of Acamar. She too was unable to tell him anything about the natives of Acamar.

By this time he was convinced that the whole thing was a scheme of dolla Moran's to get him away from Mona Parker. He strongly suspected that every experienced troubleshooter in SVS had already fallen down on the job and that dolla Moran had seized upon it as a perfect method to get him out of the way and at the same time stop his rapid advancement in the company. He'd never thought about it before, but dolla Moran probably wouldn't like the idea of another V.P. in the same department.

III

HIS suspicions only increased his frustrated anger. Even if he were right, if the mess on Acamar was completely insoluble, there was nothing he could do about it. He'd still have to go to Acamar and fall flat on his face in an orderly fashion. To protest the assignment would be the quickest way to become unemployed.

He stopped off at his office and told his secretary he'd be away for a few weeks.

Just on the off chance that he might come through, he left a few orders for his assistant which he knew would be beyond that young man's ability. There was no point in giving the company the idea that his department could run just as well without him.

He stopped at the rehearsal studio to see Mona, but they were in the midst of a scene and an associate producer told him that they wouldn't break for another hour. There was nothing to do but go without seeing her. He left her a note and went downstairs.

A helicab took him to his apartment and he packed. He saw that he still had a few minutes to spare. A rather pleasant idea had occurred to him. Another cab quickly carried him to the main offices of the Fleet Seatery Trust and the magic name of the Solar Visiecasting System succeeded in getting him sandwiched in between two regular appointments.

Old Homer Van Fleet, president of the chair trust, scowled at him. "Well, young man," he said, "I hope you've come to tell me that you people are going to do a better job for me."

"I believe we're doing a pretty good job," Jeff said. "The show has a big rating and I've seen the reports of your increase in sales since you started sponsoring Galaxy Galeties."

"That's generally true," Van Fleet said, "but there are a number of spots throughout the Federation where you're not delivering. Now—"

"That's what I wanted to discuss with you," Jeff interrupted hastily. "I'm just on my way—catching a space liner in just a few minutes, in fact—to Acamar to clean up the trouble there. It occurred to me that there's a way you might be of some help—and perhaps get a bit of a jump on other manufacturers in the area."

"How?"

"Galaxy Galeties is one of the most popular visiscreen shows in the universe," Jeff said, "and I think we can safely say that Mona Parker is the best

known and best loved visistar in the Federation. I believe that it might be of considerable assistance if she and the show went to Acamar on a personal appearance tour."

The old man looked at him from his little shrewd eyes. "That would cost more money, wouldn't it?"

"Yes, sir, but I believe it would be well-spent. These new planets may feel left out of things and it might give them the idea that Fleet Chairs is interested in all aspects of their comfort."

"Maybe you got something," the old man said. "I'll give it a thought. Glad you came around, young man. Like to see you people on your toes."

Jeff took the hint and left. A helicab got him to the spaceport with a few minutes to spare. He felt sure that Homer Van Fleet was going to take his suggestion and it was with considerably more cheer that he boarded the space liner.

There was as yet no regular passenger line to Acamar Two and it was a testament to the power of SVS that the liner swerved a few light years off her course and stood by while a lifeboat delivered Jeff Reynolds to the second planet in Acamar's orbit.

The spaceport on Acamar was a small, but attractive spot on an island in a lake. As he entered the main building, Jeff caught his first glimpse of Acamarans. Having already traveled about the Federation he was prepared to accept almost any form of intelligent life, but the Acamarans were humanoid in their general outlines. They seemed to average about five feet in height although there were a few who were taller. He guessed that their weight was about proportionate to that of Terrans. They all were dressed in clothes similar to those worn on Terra. Their faces were more animal-like and they had rather prominent buck teeth. There was something just a bit rat-like in their faces, but it was not at all unpleasant. He also noticed that their faces were covered with soft brown hair and that they had broad flat tails protruding from their clothes.

A helicab, almost as modern as the ones on Terra, took him to his hotel. It was a long enough ride to give him a fair impression of Azoi City. None of the buildings were over two or three storeys in height; although the flatness was rather startling at first, he soon found them pleasant to look at. More than half the streets were broad canals, filled with water, and to his surprise he liked the effect. He remembered vaguely having read that once a Terran city had had such canals in the place of streets. Although it was already night, looking down, in the soft light of street lamps, he saw a handful of young Acamarans swimming in the canal and felt a fleeting kinship with them.

He had dinner in the hotel. To his relief, the menu included a wide variety of Terran foods. He thought of trying to learn something about the planet, but realized that it would be easier and more efficient to get it from the local SVS vice president, so he went to bed early.

THE following morning, he breakfasted in the hotel, then called a helicab and directed it to the Solar Visiecasting building. It turned out to be the only tall building in the city. On Terra its fifty storeys would have seemed minute; here it towered over the city.

A few minutes later he was shaking hands with an Acamaran.

"I am Tokka, vice president in charge of operations here," he said. He spoke excellent Terran, the only evidence that it wasn't his native tongue showing in a slight struggle between the sibilants and his buck teeth. "Mister Anderson notified me you were on your way. I am glad to have you here, Mister Reynolds."

"Thank you," Jeff said. He found himself liking the Acamaran, alien though he was. "I hope you won't feel that it's a matter of someone coming in to take over. It's not that at all, Mister Tokka."

"Please. On Acamar we do not go in for formal titles, just as we have never adopted your custom of two or more names. Please call me Tokka."

"Then call me Jeff. We're really not so formal on Terra. In spite of our names and titles we usually call each other baby or sweetheart."

"I've noticed," Tokka said dryly. "Now, how would you like to approach our problem, Jeff?"

"Well," Jeff said, "I suppose I should learn as much as possible about the planet and your people. By the way, I've never seen an Acamarans before last night, yet there's something familiar about your race. What are your antecedents?"

"As you must know," Tokka said, "there is some relationship between all peoples of the galaxy. One species forges ahead on this planet, another species develops on that one. We Acamarans belong to the order known on Terra as *Rodere*. I believe that certain of our own anthropologists have classified us as *Rodere Erectus*. As to our more specific class, you probably find the teeth and the tail familiar clues."

Although many forms of Terran animal life had vanished years before, Jeff Reynolds had once been a steady visitor to the Terran Museum of Ancient History. Suddenly he remembered why the Acamarans had seemed familiar.

"Beavers," he exclaimed.

"Exactly," Tokka said, nodding. "We are closely related to the form of life you knew as beavers. On your planet, they remained stationary on the evolutionary scale, while on Acamar the same life form continued to develop."

"Then that explains the canals, the reason for almost every home being surrounded by water."

"Of course. My ancestors built their homes in water and so this has become traditional in our architecture. The same influence restrains us from building what you once called skyscrapers. In many of the older houses here, you will also find a traditional door built below the surface of the water. Your ancestors lived in caves and trees, so your architecture has featured cave-like apartment houses and the towering structure of the tree. There is emotional security

in retaining some aspect of the patterns of our beginnings."

Jeff would have liked to pursue the subject further, but he reminded himself that he was here on business.

"You know why I'm here?" he asked. Tokka nodded.

"What is your own theory about it?" Jeff asked. "Surely you, as an Acamarans, should be able to know why the stations here will not carry any of our commercial shows. Or why Terran products don't sell here."

"To my shame, I should," Tokka said. "Unfortunately, we Acamarans have not had your experience in such matters. I'm afraid it is beyond my rather simple mind. It is true that the Terran manufacturers have done nothing to adapt their products to our needs, but this should not stop all sales. So far as Terran advertising is concerned, I have been able to arrive at only one conclusion."

"What's that?"

"Well, it may be that your advertising is so subtle that we are unable to perceive the essence of its influence."

"Too subtle?" Jeff exclaimed in surprise. He'd heard many criticisms of Terran advertising, but to the best of his knowledge this was the first time anyone had ever accused it of being too subtle. He could hardly believe his ears.

Tokka nodded vigorously. "That is my theory. Perhaps you will be able to discover if it is correct. You see, even now, we have had very little contact with you Terrans. We have had access to much of your literature, both visual and audio, and we have learned and adopted a great many of your customs and fashions. But since we have had very little direct contact, I'm sure there are psychological factors which escape us. Surely a race like yours, so much more advanced than mine, must be more subtle in your methods of influencing sales."

"Maybe," Jeff said doubtfully.

IV

JEFF spent most of the day carefully

wading through a great mass of reports. Even with the explanations Tokka offered, they made very little sense to him. He agreed to have dinner at Tokka's home, so they left the office early and made a brief tour of Azo City. With the slight architectural difference, there were many reminders of Terran cities. Where there were Terran and Acamaran stores side by side, it was impossible to tell them apart. Window displays and outside signs would be identical. Yet Jeff noticed that Acamarans, strolling along the walks on either side of the canals, would pause to look into the Terran windows, then walk on. But when they stopped to gaze at the same display in an Acamaran store they would invariably end by entering.

After a while, he noticed that there seemed to be an unusual number of dentists in the city. And nearly all dental offices carried a sign announcing they specialized in "dental amputations." Jeff expressed his curiosity.

"One of the penalties of civilization," Tokka explained. "In more primitive times my people used their teeth to cut down trees which were utilized in constructing our homes and dams. The continual use kept our teeth sharpened down to the proper length. But now we have become mechanized and our teeth serve only to eat our food. As a result, our front teeth continue to grow throughout our lives. At regular periods, we must have the teeth amputated or they would get so long that we would not be able to eat at all."

That night Jeff had dinner at Tokka's home, meeting the rest of the family. He learned that Acamarans didn't use the husband and wife designation, common on most planets, but merely referred to their "mates" with nothing in the reference to indicate sex.

It was a pleasant evening. There was a close family feeling in Tokka's home which Jeff had seldom seen in Terran homes. He liked both Tokka and Ghannik, and even enjoyed it when the three small children all climbed on his lap at

once and demanded that he tell them a Terran story.

The following day there was a visitape from the home office announcing the decision to send *The Galaxy Gaieties* to Acamar on a personal appearance tour. Considerably cheered up by it, Jeff went out with Tokka on a round of the local advertising agencies and the independent visiscreen stations.

By the end of the second day, Jeff Reynolds was in a greater confusion about Acamar Two than he had been before leaving Terra. He had examined hundreds of pages of local advertising copy, and had absorbed a great deal more in the rehearsals and actual visicasts of numerous local shows. As near as he could tell, their advertising was about on a par with that of Terra perhaps a thousand years earlier. It was crude, dogmatic and bumbling. Yet he sat in with dozens of studio audiences and watched them rush out to buy the product the minute the show was over. He visited homes to watch the visiscreen and again saw the observers rush out to buy as soon as the show went off the air. He had to confess—but only to himself—that on at least two occasions he had felt a faint desire to respond in the same fashion. It was, to put it mildly, baffling.

"It's not a question of subtlety," Tokka suggested, "perhaps there is some difference in the metabolism of our two races, since our advertising fails to move you just as yours fails to reach us."

This was so obviously silly on the face of it that Jeff didn't bother to even answer. And at the end of two days Mona Parker arrived on Acamar and he firmly pushed the problem from his mind.

"Isn't it wonderful, darling?" she greeted him. "Our sponsor suddenly decided to send us here for a personal appearance tour. We'll be here all of two weeks. And now you can start showing me this quaint little society."

"Simply wonderful," Jeff agreed. He'd decided, with a sudden flash of intuition, not to tell her his own part in the personal appearance tour. It might make

her start feeling sorry for Guy dolla Moran as the victim of a trick. It was enough that Jeff was himself aware of having gotten the better of the vice president.

The actual appearances didn't start until the following day, so Jeff awarded himself a well-earned day off and took Mona around the city. At first, he was slightly annoyed at her obvious condescension about the Acamarans, but he was so delighted to be with her that he soon forgot it.

That night they had dinner together, then danced until quite late. Afterward, at Mona's insistence, they went for a midnight swim in the canal in front of her hotel. Then she invited him to her rooms for a goodnight drink. This was the first time she'd ever done this and he wondered if it weren't the romantic result of the three moons which sailed lazily above Acamar II.

SOME three hours later, a deliriously happy young visiscreen executive returned to his own hotel. The fact that this left him a bare two hours of sleep was unimportant and his auto-intoxication brought him briskly out of bed at the proper time. Even the brave new world had not basically changed the actions of young men who thought they were in love.

His elation carried Jeff to the offices where in about two minutes it deserted him. The cause was the man who sat in a chair talking to Tokka. It was Guy dolla Moran.

"Jeff, boy," the vice president cried. "How are you, sweetheart?"

"Fine," Jeff said with false heartiness. He pulled himself up out of the shattered remains of what had been a victory and tried to be natural. "How are you, baby? Long time no see."

"Never felt greater," the vice president said. It was obviously the truth, Jeff thought ruefully. "Matt and I thought I'd better run up here and see that the personal appearance of the Gaieties gets the old personal touch. And while I'm

here, I thought I might as well check in early and go over the results of your little mission."

"Oh," Jeff said, all too aware that there were no results.

"Tokka here has been giving me a rundown on what you've been doing," the vice president went on. "Not good, baby, not good. I love you, Jeff, boy, but you're not using the old thinker."

"You think I'm missing something?" Jeff asked.

"It's a big problem, boy, and you've got to take a bigger look at it. I don't think you can even begin to think it out until you've been over the whole situation. I've just been telling Tokka I think the two of you ought to take a swing around the whole planet. Say about two weeks of finding out how they do out in the corn belt—if they have any corn."

Jeff saw the idea at once. Mona Parker was scheduled to be in Azoi City for two weeks and then she'd return to Terra. Guy dolla Moran wanted him to wander around over the planet for two weeks. His face tightened.

"Of course it's only a suggestion," the vice president said. "You think I'm wrong, lover? What say we call Matt and leave it up to him. He's the one who gets paid for thinking, so we might as well let him do it. What do you say, sweetheart?"

Jeff knew when he was licked. He knew that Anderson had already been sold on the idea or dolla Moran would have never suggested calling him. "No," he said slowly, "you're right, Guy. Absolutely right. It's a wonderful suggestion. Tokka and I will start out in a day or two."

The vice president was shaking his head, more in sorrow than in negation. "Not the SVS way, sweetheart," he said. "You know that. You know what Matt always says. 'If it's worth doing now, then it was worth doing yesterday.' Just before you came in, I had Tokka call and charter a cruiser for the two of you. We have to move fast, boy. Am I right?"

"You're right," Jeff said wearily. He tried not to see the grin on the vice president's face as he and Tokka left.

Once before they took off, he tried to call Mona, only to get the message that she'd left to meet Mr. dolls Moran. Jeff glumly climbed into the cruiser and they left Azoï City.

Things in what dolls Moran had called the corn belt were no different than in Azoï City. The Acamarans would look at Terran advertising in utter boredom and never go near a store. They would take one look at local advertising and bolt to spend their money. Even Tokka reacted exactly the same way as the other members of his race and no ad ever failed to send them all scuttling for the nearest vendor. It was maddening.

By dint of constantly urging Tokka on from one place to another, they managed to cover the entire planet in thirteen days. It was the evening of the thirteenth day when they landed back in Azoï City. Jeff immediately called Mona, only to learn that she had already left with Mr. dolls Moran. His only hope had been that the vice president had gone back to Terra after getting rid of him and that he would still have a stolen twenty-four hours to spend with the star. With that hope collapsed, he finally consented half-heartedly to go home with Tokka.

There was a happy reunion between Tokka and the rest of the family, which only made Jeff feel worse. There was a quite good dinner, but he failed to taste a single bite of it. Afterward they all sat down to watch the visiscreen.

There was a quite good dramatic show on, but Jeff only stared at it blankly. Then it was time for the commercial. The minute it started, he recognized it as the one for an Acamaran drink called Aqui-cola. He'd checked the particular ad any number of times—and had even tried the drink, which he thought horrible—so Jeff displayed little interest. He was vaguely aware that the family suddenly seemed restless, then a moment later he found himself in the grip of an uncontrollable yearning for Aqui-cola.

He leaped to his feet and joined the others in a rush for the kitchen.

The case of Aqui-cola in the refrigerator lasted only a few minutes while they all guzzled happily. Jeff himself consumed three bottles before his strange thirst abated.

"Lucky you put in a supply today," Tokka said to Ghamik. "We'll have to pick up some more tomorrow. Something must have happened." There was now a puzzled frown on Tokka's face as they went back into the living room.

V

THE commercial had been replaced by an Acamaran announcer who wore an apologetic expression.

"My dear friends," he was saying, "I wish to extend the apologies of Aqui-cola, the independent stations of Acamar, and myself for the commercial which was just visicast. Due to circumstances beyond our control, the advertising was entirely too strong. Until we can locate the trouble, we are signing off."

"So that was it," Ghamik said, getting up and turning off the set.

Jeff was staring at the visiscreen with a puzzled air. Finally he turned to Tokka. "I don't understand," he said. "As near as I can remember that advertising copy was exactly the way it was when we checked it. I don't see where there was a single word changed."

"Words?" said Tokka, looking as puzzled as Jeff. "Of course, they were not changed. The only change was in the essence of the advertising."

"But how can you change the essence without changing the words?" Jeff wanted to know. "And why did such a small change suddenly affect me? I've never had such a reaction in my life. I, felt almost hypnotized."

"That's right, you did get it this time," Tokka cried. "Perhaps my original theory was correct, but in reverse. Perhaps because we are a primitive people we are the ones using the more subtle advertising. Of course, that's it. I

bad completely forgotten that the more primitive the race, the more acute the sense—" The Acamaran broke off and looked bewildered. "But that can't be right either. If it were, we would be more susceptible to your advertising, not less."

"You left me back among the asteroids," Jeff said. "What the devil are you talking about?"

"The advertising, Jeff. If ours was more subtle than yours, then yours would overpower us. If yours was more subtle than ours, then ours would overpower you. But neither works that way. Can it be—but no, that is utterly impossible. You do use perfume and—"

"Perfume?" interrupted Jeff. "What does perfume have to do with it?"

"But everything," said Tokka. "You must know that. You do use some perfume we can sense, so it must be a matter—"

Jeff interrupted again. "Are you trying to tell me that you use some kind of perfume to overcome sales resistance?"

"Of course. Everyone does—don't they?"

"And it comes out of that set?" Jeff asked, gesturing toward the visiscreen.

"Naturally—"

"And you have one perfume that will make everyone rush out for an Aquicola, another that will make everyone want a new suit, a third to create the desire for a new helicar—a different scent for every product you manufacture?"

"Yes, yes," Tokka said. "But surely you do, too. Doesn't everyone? Is there any other way?"

Jeff leaned back and counted slowly up to ten. Then he opened his eyes and looked at Tokka. "If you have such scents, why do you bother with advertising copy at all? Why not just spray out the scent and forget about commercials?"

"We used to do it that way," Tokka said, "before we came in contact with you Terrans. But we were anxious to learn, and your commercials seemed

such an entertaining custom, so we adopted them and used the scent at the same time. Do you mean that you have never used such scents?"

"I'll tell you all about the history of advertising later," Jeff said. "Right now we have a date." He grabbed the startled Tokka by the hand and dashed from the house, almost falling into the canal in his haste.

IT TOOK a dozen calls before Jeff found that Guy dolla Moran and Mona Parker were having dinner in something called The Blue Dam. A hastily summoned helicab took them to the restaurant. A headwaiter pointed out the table and Jeff marched down upon it, with the excited Tokka in tow.

"Well, Guy, old sweetheart," Jeff said as he reached the table, "your troubles are all over. Hello, Mona."

Instead of the smile he'd expected, the visisreen star glared up at him. "Jeffry Reynolds," she said, "don't ever speak to me again." She got up and swept away in the general direction of the rest rooms.

"Now what's the matter with her?" Jeff said.

"You know how it is, baby," Guy dolla Moran said. "Women are sensitive about some things. You shouldn't have been so open about your little pleasures."

"Little pleasures?" Jeff said. "What little pleasures?"

"Taking a little jaunt around Acamar with an alien female," the vice president said. "Not only an alien female, but one who is married. Not the thing to do, Jeff, boy."

"Female," repeated Jeff, looking from dolla Moran to Tokka. "Do you mean he—I mean she—I mean—oh, hell."

"Exactly, sweetheart. Of course, Tokka is a female—and up until now I thought a happily married one."

Jeff stared dumbly at Tokka.

"I am a female," Tokka said. "But what he is suggesting is utterly alien to our culture. It is impossible, in addition to being untrue, as you know."

"But—" said Jeff, gesturing toward the handsome tweed suit Tokka wore.

"Oh, the suit," Tokka said. "We were quite taken with Terran clothes when we first saw them and quickly adopted them. It wasn't until very recently that we discovered males and females on Terra dressed somewhat differently. By that time individuals on Acamar had become accustomed to whichever type of dress their fancy had first hit upon, so no one bothered trying to conform to a rule which seemed to have very little sense. You see, Jeff, on Acamar, except for mating there is no importance placed on the sex of the individual. So I'm afraid it never occurred to me to mention it to you. I'm sorry."

"I'm afraid," dolla Moran said smoothly, "that Mona will not be inclined to accept that story. I do, of course, but Mona tends to be more old-fashioned in her concept of morality."

"I'll straighten that out later," Jeff said impatiently. "In the meantime—"

"In the meantime," the vice president interrupted, "not only have you fallen down on the job, but you've been leading what many Terrans might consider an immoral life. You both must be aware of the morality clause in your contracts. I was going to leave a memorandum in the morning, but since you're here you might as well know you are both through at SVS."

"But you can't fire us," exclaimed Jeff. "I've got—"

"Of course, you have an explanation," dolla Moran said. "I understand about those things, sweetheart. I've traveled around to the planets and I've had my fun—more quietly, it's true. But unfortunately I am not a major stockholder in the Solar Visicasting System and I'm afraid the others are less broadminded. Now, I do wish you'd leave so that Mona will feel that she can return to our table."

For a moment, Jeff stood and glared at his late superior. Then he turned and strode from the room. Tokka followed.

VI

SO STUNNED was he by the sudden developments, it was several days before Jeff Reynolds really began thinking about what had happened.

In the meantime, he had taken a job, along with Tokka, at one of the independent visicasting stations. Within a couple of weeks, he had a good understanding of the Acamaran methods.

One night there was a conference between Jeff, Tokka, Ghamik, and a number of leading Acamarans. After it was over, Jeff was ready to return to Terra.

Since he no longer had the great network back of him, it was not a simple matter to return. But after a delay of a week, with the aid of a friend or two on Terra, he managed to have one of the space liners stop by and pick him up.

His first day back in Nuyork was a busy one. He first went to the local offices of the Galactic Federation, then set out to make a number of appointments by visiphone. At eleven o'clock, he showed up for the first one, at the office of Homer Van Fleet. This time he was kept waiting slightly longer than the time he'd called before, but he was soon shown in to the large private office. But instead of the blunt-featured old financier, he was facing a quite attractive young woman.

"I beg your pardon," he said. "There must be some mistake. I had an appointment with Mister Van Fleet."

"No mistake, Mister Reynolds," she said with a smile. "I am Leesa Van Fleet. Father is home sick today, but he said that I should see you. I checked with him when you called this morning."

"Well, that's nice," Jeff said. "That is, I don't mean that it's nice that he's ill—well, you know what I mean."

She smiled and waited.

"I have two things to discuss with you," Jeff said. "I'll take up the least important first. I believe your company still has the practice of paying a five per cent commission on anyone who sug-

gests a new product and a new market."

She nodded.

"Fine. Incidentally, I also have a free suggestion. For the Acamarans market, which will very soon open, design a new chair with a built-in tail rest. Now, then, I expect you normally have a considerable waste of wood in building chairs?"

"Yes," she said.

"My suggestion is that this wood be pulped, then pressed into bars, small canes, and such, with a small amount of flavor added and sold on Acamar."

"Flavored wood, Mister Reynolds?"

"Flavored wood," he said. "You see, Acamarans are evolved from beavers. As a result of civilization, they no longer gnaw on wood and they have a lot of tooth trouble. So the idea is a sort of wood candy, on which they can gnaw, obtaining a flavor and preserving their teeth. I wouldn't be surprised that it might be a bigger business than chairs. And I have an excellent advertising program worked out for it. Which brings me to my second point—it's rather lengthy and I wonder if we might not discuss it over lunch?"

"I think that would be very nice," she said.

After a more than pleasant luncheon, Jeff Reynolds hurried off to keep his other appointments. It was a full afternoon and it was shortly after four o'clock when he arrived at the SVS building. He went immediately to the top floor. After exchanging a few words with the president's secretary, he stepped on the conveyor path and was whisked through the small forest.

In addition to Matthew Anderson and Guy dolls Moran, there were four other men sitting there in the private office. With the exception of one man, they all seemed to be rather disgruntled.

"Sorry I'm a few minutes late, gentlemen," Jeff Reynolds said as he stepped off the conveyor. "Pressure of business, you know."

"What's the meaning of this Reynolds?" Anderson demanded severely.

He indicated the one man who did not seem annoyed. "Jones here demanded that we all get together to hear you. I tried to point out that you are no longer connected with SVS, but he still insisted on it and would offer no explanation. Naturally, since he is the largest stockholder. . . ."

"Naturally," Jeff said. He looked over the assembled men. "I believe you gentlemen together hold all of the shares in the Solar Visicasting System. Ranging from Mister dolls Moran who owns two shares to Mister Jones who owns two hundred thousand."

"We own all the shares," Jones said.

"Fine," Jeff said cheerfully. "I have a proposition to put to you, but first I have another small matter to bring up. I have been seeing a number of important Terran industrialists today, including the owner of the Jet Rocket Tobacco Company. Do any of you gentlemen happen to smoke Jet cigarettes?"

From the shaking heads, it was evident that none of them did.

"As you know," Jeff continued, "Jet cigarettes do their advertising on a rival network. That is perhaps the reason no one here smokes them. We might, however, put them in the category of potential clients of SVS. I have just given six packages of Jet cigarettes to Mr. Anderson's secretary. I suggest that we have them brought in and all of you try them. Remember that Jet cigarettes are longer, that the harmful ingredients found in other cigarettes have been removed. Light a Jet and be space happy."

THE six men looked at him as if they had suddenly been offered proof that he was insane.

"If you ask Mr. Anderson's secretary for the cigarettes now, or within the next thirty seconds, she will give them to you. If you want them after the time period is up, they will cost you fifty credits per package."

"What sort of nonsense is this?" demanded one of the stockholders. "Giving us a lot of advertising fiddle-faddle and

saying you'll sell us ordinary thirty-unit cigarettes for fifty credits."

"I believe," drawled Guy dolla Moran, "that the colloquial expression is that he's blown his space plates."

"Just a minute." It was the man named Jones. "As the majority stockholder, I insisted that the rest of you be here. I did so because this young man phoned me and said that he had proof that our stock could be worthless tomorrow. At his suggestion, I checked with Charlie Lane at Planetary Association of Manufacturers. Charlie assured me that he knew what he was talking about. I don't know why he's talking about Jet cigarettes either, but I suggest that we hear him out."

"Thank you, Mister Jones," Jeff said. "My proposition, gentlemen, is this. The six of you own all the stock of the Solar Visicasting System. I am suggesting that each of you sell me one-half of your stock and that one of you sell me an additional share. This, you will say, will give me control of SVS, and you will be quite right. But it will also save the company and make your remaining shares more valuable than they have ever been. Incidentally, I expect to pay each one of you exactly one credit for the half he turns over to me."

There was an excited babble of voices from the angry men.

"This farce has gone far enough," said Matthew Anderson. "I suggest that we call in the Galactic police."

"Sales resistance, eh?" Jeff said cheerfully. He pulled a small atomizer from his pocket and pressed the trigger. There was a soft hissing sound, although no spray was visible.

"What the—" began Anderson, only to break off. Startled expressions appeared simultaneously on the faces of the six men. Two of them started searching through their pockets.

"Light a Jet and be space happy," one of them repeated.

"Your secretary," said another to Anderson. "I think he said she had some."

As one man, the six of them rose and

ran across the office. Jeff Reynolds pulled a Jet cigarette from his pocket and puffed happily on it.

A few minutes later, the six men reappeared, walking back through the artificial forest. Each of them puffed on a cigarette. Beyond them, Matthew Anderson's secretary stood in the doorway, a puzzled frown on her face and her hands full of money.

"A great smoke," Anderson said as they came up. "I don't know how I happened to overlook them before."

"Light a Jet and be space happy," Guy dolla Moran said joyfully.

VII

JEFF REYNOLDS waited, smoking his own cigarette. After a moment bewildered frowns appeared on their faces. Six pairs of eyes swiveled toward Jeff.

"How did you do that?" demanded Jones.

"With this," Jeff said, holding up the atomizer. "Total cost of the experiment —less than one credit."

"You mean you sprayed something in the air that made us have to buy Jet cigarettes?"

Jeff nodded. "I could as easily have made you have an irresistible desire to sell me your stock, but I thought you might appreciate a more normal commercial application."

"It can apply to other products?" Anderson asked.

Jeff nodded again. "This," he said, "is the secret of why our advertising failed so miserably in competition with Acamarans advertising. The Acamarans have been using these scents for years. They took up our commercials because they thought them entertaining, but this is the sales force. There are as many different scents as there can ever be products. With this formula, gentlemen, the people can be made to buy anything."

"Or do anything?" asked one stockholder. He was a well-known Federa-

tion politician and very prosperous.

"Yes," said Jeff. "The things done, however, would have to be limited by ethical considerations."

"Of course, of course," the politician said hastily.

Jeff was all too familiar with the expression he saw on the faces in front of him. "I might add," he said, "that the secret process for this formula is duly patented under the monopoly laws of the Federation. It is owned by the newly-owned corporation of Tokka, Ghamik, Tishtiri, Azrak, Khamis and Reynolds. I am, by the way, the majority stockholder."

This brought them rudely back to reality and they stared at him with speculation.

"There are two ways the new advertising medium can be used," Jeff said. "Certain changes could be made in our visicasting system, making it necessary for everyone to buy new visiscreen sets. The new ones would have a built-in attachment which enables the scent to be sprayed into the room. We could still go on using advertising copy, although the actual selling will be done by the secret process. As you may have noticed, it has no noticeable odor. It can be mixed in proportion to affect any form of life in the Federation. On Acamar, for example, their senses are more acute than ours so that the mixture that worked for them had no effect on us. On the other hand, the process can be introduced directly into the air by a company representing advertisers. Some such method as low-flying heli-cars dusting cities. I imagine we could get the Federation to allocate time channels so there would be no confusion."

There was a long silence. "In connection with your first method," one of the men said ironically, "I suppose you've also arranged to cut yourself in for a slice of the visiscreen set manufacturing business?"

"Of course," Jeff said. "By the way, the process can also be used in connection with the dramatic end of visicast-

ing. For example, in crime shows, we might use a mixed formula which would set up a hatred for law-breakers and a love of our police force. Or in a comedy, we can hypo the script by a formula which will make everyone think it is very funny."

"Then there are the love stories . . ." one of the men said dreamily.

"Gentlemen," Jones interrupted, "all of this makes interesting speculation, but I suggest that we face the fact that young Reynolds has us over a jet-engined barrel. I suggest that we sell him one-half of our combined shares, at the stipulated price. I will provide the extra share he demands."

There was some grumbling, but they all finally agreed. The transfer of stock was soon accomplished and Jeff gravely paid out six credits.

"I suppose," Matthew Anderson said, "that you will want my resignation now."

"Wby, I love you. Matt, boy," Jeff said. "I wouldn't think of firing you—as long as you keep on the ball. At the present, I have only one administrative change to suggest." His glance passed over Guy dolla Moran like a breath of winter.

"Anything you suggest," Anderson said eagerly.

"We must have in the neighborhood of a million offices throughout the galaxy," Jeff said. "In growing to such size, it is inevitable that some departments lag behind others in the progress. I imagine that a deplorable situation which I noticed on Acamar exists everywhere. I suggest that the creative end of SVS is more than adequately manned, but that we need comparable talent in a department which is often neglected. We have a man who is ideally suited for what I have in mind. I suggest that our Mr. Guy dolla Moran be made the executive vice president in charge of all SVS restrooms."

"Excellent," Anderson said briskly.

The new executive vice president muttered something, but it was inaudible.

"I love you, Guy, boy," Jeff said as he left the office.

News travels fast in the big networks. Jeff Reynolds stopped off briefly in his old office and then went downstairs. Mona Parker was waiting in the lobby, looking more beautiful than ever. When she caught sight of him, she ran forward and threw her arms around his neck.

"Oh, Jeff," she exclaimed. "I've just heard the news. You're wonderful. Are you taking me to dinner tonight?"

Jeff Reynolds carefully disengaged the arms from around his neck. "I'm afraid not," he said. "I'm sure it would be pleasant, but I must think of my career. I doubt if it would do me any good to be seen with a mere actress."

And I'm sure my fiancée would not approve."

"Your fiancée?"

"Yes. Leesa Van Fleet. We became engaged at noon today. A charming girl." He took a second atomizer from his pocket and sprayed gently before walking on.

Miss Mona Parker, glamorous star of the Galaxy Galettes, turned and rushed off in a different direction. Later, the visinews reporters were to describe her mad dash all over Nuyork and have a prominent analyst offer a technical, and entirely wrong, explanation of why she had been seized with an uncontrollable desire for sour grapes when the nearest ones were on Vega IV.



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THE CHILDREN

a novelet by

MIRIAM ALLEN de FORD

McElroy would never have started that time travel business if he'd known the future would reach out and sock him in the jaw!

I

THINK," said Dr. Schultz brusquely, "that this is a preposterous and essentially unscientific project. There is nothing new about the experiment itself; it was first announced nearly twenty years ago, in 1952, before the British Association. We have been using it ever since, and we know the effect remains good for periods up to five years. Longer — even immensely long — periods are merely supererogatory.

"As for the other aspect of McElroy's proposal, involving the possible future discovery of means of time-travel, that seems to me the wildest of unscientific speculations. I don't know how the rest of you feel, but so far as I am concerned, I do not favor lending the resources of

the International Association for the Advancement of Science to this harebrained proposition."

Kemet Ali cleared his throat. As chairman of the IAAS, his chief asset was his unfailing tact. But before he could begin, James McElroy, his earnest eyes peering through his spectacles, spoke up.

"May I say just a word?" he asked. He was too thin, and gray hairs showed already among the brown. His voice still had the deadened quality it had displayed ever since his personal catastrophe six months before. But there could be no doubt of the continuing keenness of mind of this brilliant young geneticist who had actually become one of the most valued workers on the IAAS staff soon



after he had achieved his Ph.D and Sc.D. simultaneously at the incredibly early age of twenty-two.

"I am quite aware," he said, "that there is every chance the experiment I propose will be an utter failure. Careful as we should be, in the light of previous experience, never to prophesy what scientific discoveries may or may not be made in the future, I agree that practicable time-travel may well be a chimera mankind will never bring into actuality.

"But I can't see that it will do any harm to take so simple a chance—and if it should succeed, we shall have proved at least one point of immense value, which is that for all time to come humanity as a species can insure its practical immortality, at least as long as the earth itself is livable.

"I want very little of you—only permission to place my tape-recording in our innermost vaults, and the use of a very small space in our concession in

STARTLING STORIES

Antarctica. I shall be interfering with nothing and nobody, in the little room I shall take up. And if—I say if—a month from now even one of the persons at whom my message is aimed should be able to visit this place and time, the result would in some ways be the most astounding revelation of all scientific history."

"Would you expect these—these visitors to give us detailed information about their own eras?" asked Dr. Duseldina Moro.

"That I doubt very much; I think in the first place they would be unable to do so, lest the actual course of history be interfered with; and in the second place I doubt if we should be equipped to understand if they did try to tell us.

"But if I, standing here a month from today, can secure actual living evidence that those phials buried in Antarctica can still be used a hundred, a thousand, who knows how many thousands of years in the future—that, while civilization continues, depleted human stock can always be renewed and regenerated—"

"Exactly," interrupted Schultz rudely. "And what makes you think, Dr. McElroy, that you should be chosen as the perfect human specimen? Why not conduct first a scrupulous inquiry and select the young man, anywhere on earth, whom we all judge to be, mentally and physically, the fittest subject—or several such men, for that matter?"

HE STOPPED short, sensing the embarrassed hush around the conference table. McElroy stammered: "I wanted to spare expense and labor. Dr. Schultz. And I don't consider myself 'the perfect human specimen' or anything near it. I only felt that for this first experiment it would be better to use someone in our own organization. As a geneticist I know I carry no serious recessive defects. And—and I felt—"

Kemet Ali scribbled a hasty note and passed it down to Schultz. The biochemist read it and reddened uncomfortably.

It said, in the chairman's easy American idiom, "Give the poor guy a break."

"Very well," Schultz conceded abruptly. "I withdraw my opposition. Perhaps you are right. We can use other subjects later, if this first experiment succeeds. As I don't expect it to!" he bristled.

His colleagues averted their faces. They had all been remembering, as Kemet Ali had reminded Schultz, how near they had come to losing McElroy altogether. For a while the psychologists had feared he would never recover fully from the shock of that dreadful day when his adored young wife and their infant son had burned to death before his eyes.

Dr. Norah Wong came to the rescue of the difficult moment.

"I notice," she said in her singsong voice, "that there is a slight error in your prospectus Dr. McElroy. You name the 25th of next month for the possible visit of the—er—the time-travelers—if any. It is the next day we meet, the 26th."

Young James McElroy flushed.

"I know," he mumbled. "I just wanted—if you don't mind—I shall of course make a full recording by tridimens-telescreen. It will be the same as if you were all here. I shall present it the next day at the April meeting."

You mean," Nigel Wycliffe put in helpfully in his precise accent, "since you yourself are the—the subject, you would prefer that this first—hypothetical meeting be made in private?"

"Exactly," McElroy said gratefully. "After all, if any of—the results do arrive, and if they should be odd, or—or unsatisfactory—"

"Of course," Dr. Moro seconded him. "Of course Dr. McElroy does not want twenty onlookers at this meeting. We all understand."

"You have the recording ready?" asked the chairman.

"All ready, just as I read it to you yesterday. And I have the vials ready too, in glycerol deep freeze. As soon as I have your permission, I can fly to Antarctica, bury them, and mark the spot as I have

indicated in my instructions."

"How many?"

"I thought three."

"I should make it five," said Kemet Ali. "After all, there is always the possibility of one of them being lost or spoiled. And you don't know how many times one may be used and the results merely added to the record, before the point may be reached when time-travel is in effect."

"If it ever is!" Schultz exploded.

"If it ever is," the chairman responded blandly. "I take it, ladies and gentlemen, there is no further objection to giving Dr. McElroy unanimous consent? Thank you. On April 26th, then, we shall hear his report."

"We shall hear that nothing happened!" grumbled the irrepressible Schultz.

II

IN 2150, it was decided that the IAAS headquarters had become obsolete and inadequate. The buildings were all torn down and the site cleared for an entirely new construction. In the course of demolition, the innermost vaults were uncovered. A committee of the Association opened the vaults and went over the contents. One thing they found was a twentieth century tape-recording apparatus, marked: "To be opened by any competent scientist." They opened and reproduced it, with mingled feelings of interest and amusement.

"This James McElroy—I've seen his name in footnotes now and again—certainly believed in long-range projects," one of them remarked. "I wonder if anything happened on April 25, 1970? I don't suppose they put it in the records, for fear of influencing future developments."

"What shall we do with this thing?" inquired one of his colleagues. "Just put it back in the new vaults, to wait for our forthcoming buildings to fall to ruins in the course of time?"

"No. I think first we ought to follow

instructions, as a duty to the progress of science."

"But we haven't achieved time-travel, or any prospect of it."

"True, but we can do as McElroy said—locate one of his phials buried in the Antarctic—at 72° 20' S., 155° 15' E., near the South Magnetic Pole, and see if the contents are still viable. Leave the rest of them *in situ*. If the thing works, then we add the information, at the proper time, to McElroy's recording, with data of name, place, and so on for possible future discoverers, and redeposit the recorder in our new vaults. We shall have to get official authority, of course."

"Suppose nothing happens?"

"Then even so, I think we should say so—though I agree that in that case there would be little likelihood of any success later on. Too bad we'll never know the end of the story."

The experiment succeeded, and the record was duly made.

In 2900, during the Second Dark Age following the Last Plague and the Terminal Atomic War, the IAAS buildings erected in 2150 lay a mass of ruins on the shores of the Pacific Ocean. The blasted earth around them had long lost its radioactivity, but the huge tumbled confusion of steel and stone was a forbidding and a forbidden place to the roving bands of illiterate and superstitious hunters who were the only human beings left alive in what had been a metropolitan area. When the leader of one of these groups sighted, in his tribe's wanderings, what had become known as the Devil's Castle, he hastily ordered his followers to turn in another direction. There was nothing to hunt, anyway, for miles around the desolate place, unless one wanted to eat lizards and scorpions.

But rumors and hearsay and legends grew up and seeped into the ears of children listening to stories by the campfire. Because the Devil's Castle was terrible, soon it began to take on a fearful fascination as well. Curiosity and venturesomeness do not die out of the human

race because knowledge is under a cloud. Boys and girls dreamed and egged one another on to boasts and dares; young people, restless and bored, planned half-meant expeditions and forays. Perhaps, they told one another, somewhere in that ruined landmark lay hoards of jewels and strange metals, such as had been uncovered sometimes in the forsaken cities, to reward a bold invader. But time would go on, and the hunting would be bad and need all their energy, and the young people would grow up and seek mates, and the children would come, and then there was no leisure or taste at all for adventures into the unknown.

A YOUNG man named Bom was the one who did finally dare to search the ruins—all alone, in a world where the only safety and comfort came from close huddling in one's own native group. He was a strange young man, unpopular with other youths or with the girls, given to daydreaming by himself when he should be out hunting for the tribe, inarticulate and dissatisfied—a young man who, a thousand years before or a thousand years after, would have been a pioneer, a searcher, a discoverer. When from afar, on one of his clan's endless journeys for food, he glimpsed the Devil's Castle for the first time since early childhood, the urge was too strong for him to resist. He was terribly frightened, not least from the difficulties of escaping from the band. At night when all the others slept, and by the perilous possibility that after his adventure he might never be able to find them again. That was a much more real and dreadful danger than the stories he nevertheless half-believed, of malevolent demons guarding the hidden treasures.

He escaped unseen and unheard, and dawn found him before the tangled pile of broken ruins. No demons worse than cold and fog and wind assailed him. If the clan had missed him by now, they would never follow him here or guess that he had come here: doubtless they thought he had strayed too far from the

sheltering fire and a cougar or bear had caught him—these predators were becoming bolder and venturing nearer to human camps as the hunters killed off more and more of their prey.

Valiantly Bom set to work to explore the Devil's Castle. His plan had been to leave when the sun was halfway across the sky toward the west, so as to catch up with his tribe before night if possible. He burrowed through tunnels and under heavy stones that balanced menacingly above his head; he scrabbled in the earth and search roofless rooms crowded with strange broken objects whose use he could not even imagine. But nowhere were there jewels or any other treasure he could use—only twisted pieces of metal not fit to be fashioned into weapons, or shards of glass and hunks of plastic material unusable as ornaments or tools. In his explorations he came upon a huge underground wall of stone and cement, in the middle of which was a series of heavy metal dials. Bom guessed that this was a sort of door, such as he had seen in houses in the deserted cities. The cement had cracked, and it was possible to tear out pieces of it large enough to allow him to enter what had been the inner vaults of the IAAS.

It was a complete disappointment. There was nothing inside but shelves upon shelves of what he did not know was microfilm, and a little metal box with characters etched on it he could not read, and containing only some unguessable object. He dropped it back where he had found it.

He had delayed too long in leaving. The sun was setting when he found his way to the open air again, his hands empty after all his search. The hungry coyotes had begun to gather. He fought hard, but they were too many, and there were no tribesmen near to hear his screams and hurry to his rescue.

III

IN THE summer of 4016 an archaeological expedition under the sponsorship

of the University of Teheran began excavation in the buried ruins of the IAAS buildings. Very quickly they became aware that their speculations, based on philological study of the few remaining ancient microfilm records, were justified, and that this was the remains of some sort of center of twentieth century science. The whole civilized world followed their progress by teletouchview. News commentators in the international tongue assured fascinated watchers and listeners in Greenland and China, in Argentina and Africa—for these local names were still used to indicate natural divisions of the World Territory—that this was the greatest archaeological discovery of the age. When at last the innermost vault was uncovered and opened, with its priceless store of microfilm—and an unexplained human skeleton lying well preserved not far away—the commentators chattered like magpies.

But suddenly their descriptions stopped abruptly, and they turned to other aspects of the expedition.

WHEN Harduk Bal, the director-in-chief, came upon the tape-recording in its rustless alloy case, he sent for the head philologist to decipher the inscription. Then the recording was fitted to its primitive transmitter—it was totally adaptable to a modern reproducer—and Harduk Bal had it translated by an expert in twentieth century English.

As soon as he had heard the translation, he got in teletouch with the Executive Council of World Government. The newly elected World President himself called Harduk Bal back after the Council's consultation.

"All right, go ahead," he told the archaeologist. "It's worth trying, long as it has been even since that additional record in 2151. But we'd better not make it public till we see if it works. We don't want to have your expedition made a laughing-stock if the experiment should be a failure, as it probably will be. Tell your publicity director to cut off further

news till we've tried the thing out."

"But the time-travel part, sir," Harduk Bal objected. "I know the mathematicians keep reporting they have made progress—they've been saying that for fifty years at least—but actually we have no more time-travel now than they had in 2150—or in 1970."

"Listen, Harduk Bal." The president touched the button which made the conversation secret. "This is for your ears alone; we heard it only last week and the Council is not ready yet to make it public. I think I can say confidently that by the time it would be needed—about twenty-six years from now—time-travel will be a demonstrated thing."

"Wonderful! Really, at last!"

"We hope so. We're almost sure. But even if we're wrong, and this new method is another failure, we could still do the rest of the experiment, and add our statement to the one made in 2150. There ought to be four vials left, and surely before the last one is used up, time-travel will be a commonplace mode of transportation, and future generations, if not we ourselves, can take advantage of it—that is, if the stuff is still any good."

"Right, sir. I'll see that the whole thing is kept quiet until the Council's ready to release it. And you, I take it, will send somebody to that location in the Antarctic."

"Immediately. Do you know, Harduk Bal, I envy the young man or woman, twenty-six years from now, who is going to make that journey back to 1970!"

"I do too. But I'm afraid nobody alive today is qualified!" chuckled the archaeologist. "By the way," he added, "what do I do now with the original tape-recording?"

"You'd better send it to me. I'll have it redeposited in the vaults of World Government headquarters in London. It doesn't matter where it is, so long as it's left for future excavators, a thousand or so years from now, of the site you're on-site. And I imagine there won't be much 'n a place that, some far-off day, will constitute an archaeological investigation

cavating, by the time you get through with it.

"It's a sobering thought, isn't it? Our most elaborate constructions some day will be ruins, just as that scientific center of yours is now."

"But according to this thing," answered Hađuk Bal cheerfully, "our past will still be our future, even then, and good old mankind will still keep moving onward and upward! And perhaps they already knew that for sure, away back in 1970!"

In 5891, or 91 GM, Kel 87459X2ZA of the third generation after the Great Migration was a candidate for his doctorate in Terraarchaeology at Skyros Institute of Science. As a subject for his thesis, he proposed—as did every other budding Terraarchaeologist—a specimen excavation on the Parent Planet.

"I don't know, Kel," his department head frowned. "It's too bad that a student as promising as you are didn't get interested in a field with more possibilities—one that hasn't been worked over until nearly all the good sites have been excavated long ago, in the nostalgic rush back to Earth after we'd left it permanently. There's still an immense amount of work to be done on the ancient Martian remains, or on those puzzling buried structures on Planet 3 in Alpha Centauri. But there's not much worth while left in the old home except in the dried-up ocean beds, and they're more rewarding to a palaeontologist than to an archaeologist."

"There's one site," said Kel daringly. "The last World Government Center."

The professor shook his hairless head.

"Now, my boy, you know that's totally impossible. Didn't you learn in elementary school that it was a strict injunction of the Migration Charter that the London Center should be left inviolate, as a symbol of the planetary origin of man?"

"Of course I learned it—and I'm not the only one who thinks it's an idiotic superstition unworthy of civilized beings.

It's worse—there may be important historical material there that we need and ought to have.

"What do you suppose has become of those buildings after nearly a hundred years of neglect? They're probably a heap of weathered rubble by now. A fine symbol!"

"They're not overgrown with vegetation, anyhow," said the professor grimly, "considering that the reason we had to abandon Earth in the first place was the drying up of the surface water and the consequent death of all vegetation, after the collapse of the moon. No, perhaps a thousand years from now, when nobody is alive with even a tradition of Earth as our former home, Terraarchaeology will revive, and then no place on Earth may be considered too sacred to be delved into. But not today. The Interplanetary Congress would never give you a permit."

LOOK, I'm not going to injure their beautiful ruins. I've got a specific thing I want to look for. We took away loads and loads of records from the World Government Center when we left. But I'm certain there is more there, of infinitely greater importance.

"See here—listen to this: it's a standard text you use in your own classes, the Compendium of World Surveys by Cort 27463Q5HW. The original plans of the Center included underground, impregnable vaults, in which World Government's most vital records could be stored in permanent safety. However, when the Great Migration occurred, searchers found no trace of these vaults under any Government building. This does not mean necessarily that they did not then or do not now exist; the required speed and enormous magnitude of the Migration operations made it impossible to make a complete and thorough investigation. Unfortunately, the setting aside of the Center as a Sacred Symbolical Area has prevented any further research."

"The minute I read those words for the first time, professor, I decided to

make Terrarchaeology my field, and to be the one to hunt for and discover the lost vaults of the World Government Center and recover whatever they contain. With the new Supra finders, which did not exist a hundred years ago, they can be located without harming or moving a stone of the upper buildings.

"I know you can't authorize me to go ahead. But will you give me a strong recommendation of my ability, that I can take to the Interplanetary Congress? That's all I want. The rest is up to me."

The professor gave up.

"That much I can do for you, Kel, and will, very gladly. But I'll have to add that I advised you against attempting the project."

"Don't worry about that professor." Kel smiled impishly. "I don't suppose it has occurred to you that this year's chairman of the Congress happens to be Mors 84912M6RG, and that Mors 84912-M6RG happens to be my Chief Guardian? I'll get a hearing, anyway, and if I have your backing I'm confident of making them see the light. It would be a pretty fine medal on the chest to be able to say that the year you were chairman, the hidden records of World Government were recovered, and that the person who made them available was your own ward!"

Six months later Kel landed his equipment near the gaunt, deserted Center. It was another month before the Supra finders located the vaults. There was richness there indeed to be stored in his Contragray ship. And buried among the records, he found a queer, inexpressibly ancient-looking metal box, marked in difficult twentieth century English, "To be opened by any competent scientist."

Kel, under the circumstances—fortunately, he even knew the language—deemed himself sufficiently competent not to wait till he got the box home to Skyro. What he heard as he listened to the recording sent him headlong to the ship, to telebeam first the professor and then the Congress. Before he returned home with his priceless plunder, he made

a quick trip to the Antarctic, where the ice, though much thinner than in earlier days, still provided the only unevaporated water on the surface of the ravaged planet. Continuing deep freeze was easy in the Contragray.

By Kel's time, travel to the past was as commonplace as space-travel. He was strongly tempted to go back to April 25, 1970, himself, to take a look at the remarkable James McElroy—say an hour or so before McElroy's appointed meeting with somebody yet unborn when Kel would have made his journey. But young and romantic as he was, Kel 87459X2ZA was also a responsible scientific worker. And so he handed over the tape-recording and the vial to the proper authorities, to let them conduct the experiment, while he buried himself in the other material he had found in the Center's vaults, to prepare what eventually became the most famous thesis ever presented by a candidate for the degree of Ter.D.

The gray parched earth grew ever more desolate as the centuries rolled over it. The Antarctic ice dissolved inch by inch, then evaporated in the unoxygenated air. The two vials left lay finally on bare rock.

Soon, under the sun's radiation, their contents died at last.

IV

GORD 20977F8EN stood for a moment at the entrance to the grounds of the IAAS Center. This was the right place and of course there could be no question as to the exact time. It was five minutes to three o'clock on the afternoon of Saturday, April 25, 1970. Unaccustomed emotions swept him—puzzlement, curiosity, frustration, and a sense of anticlimax. In a way his entire twenty-five years of life had led up to this moment; when it was over and he was back again in his own time and place, he would have to begin some entirely new career, with his reason for living hitherto no longer in existence.

He was carefully dressed in the prop-

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er clothing for a young man of the twentieth century, and in the jacket he found a pocket into which he could insert the tiny apparatus that would insure his safe return home. He had been just as carefully schooled in the English of the period, in its American version. Except for the wig, to simulate twentieth century hair, he looked like any tall, handsome youth of 1970.

What interested him more than this James McElroy to whom he had been dispatched, more even than the solution of all the vague hints and allusions he had heard since childhood, was the landscape around him. At home there were no great bodies of untamed water like this. There were hills, far higher than this one on whose summit he stood now, but they were not planted with grass and trees; indeed, he suspected, from the proximity of the site to the ocean below him, that all this verdure had been cultivated by man, and that the natural aspect of the hill would be that of a sand dune. He knew, of course, the geography of his location. He was on a flat-topped hill overlooking the Pacific Ocean, in a portion of Earth once known interchangeably, it seemed, as the United States of America and California.

As he tore his gaze reluctantly away from the view—who knew how much time he would have for sightseeing when he left, and it might well be dark then as well—and prepared to turn it in at the gate in the massive brick wall, he saw a girl walking slowly up the path, trundling some kind of machine. As he watched, she paused at a thick clump of bushes and pushed the machine inside, arranging twigs and branches elaborately so as to conceal it from any passer-by. Gord's eyes lighted up with interest; in the second before she hid the thing, he had recognized it as a primitive time-travel equipment, such as he had seen in museums at home. Deliberately he waited until the girl caught up with him.

"Excuse me," she said in twentieth century English that had exactly the same slight stiffness as his own, "but is

this the headquarters of the International Association for the Advancement of Science?"

Gord smiled.

"What is your century?" he asked.

She jumped, and stared at him with long, heavily fringed dark eyes.

"The—the forty-first," she stammered. "How did you know? Are you—"

"I am from long after you—almost as long as you are after the time we find ourselves in now. I take it that you too have been sent to see a man named James McElroy?"

"Why, yes. All my life—"

"All mine too. Let's go in together."

"What's it all about, do you know?"

"No more than you. Perhaps we shall find out now. What is your own language?"

"Interlingua. And yours?"

"A modified Interlingua too, but I doubt if you'd understand mine or I yours. Let's stick to this one, since we've both learned it well."

"My name is Wia Rustum." She held out her hand, but Gord did not take it; people of his time seldom touched one another casually. He noticed, however, that the little finger was complete—doubtless her little toes too—not rudimentary as his were. That, he had been taught, was the only physical change in mankind in the past four thousand years, unless one counted the loss of head-hair before adolescence, or the increasing number of babies born without a vermiform appendix.

"Call me Gord," he said. "The rest of it is just for official identification."

He noticed with approval that her perceptions were sensitive; she had withdrawn her hand swiftly the instant she received no answering gesture from him. She did not seem pretty to Gord, despite her chiseled features and her smooth light-bronze skin through which the warm blood showed; her lustrous black hair, arranged in some strange fashion which he presumed must be that of women of the time they were visiting, repelled him. Obviously she was of pure

Earth descent; there was no trace in her of any off-planetary mixture.

They had reached the group of white stone buildings. "This one in the middle is probably the main structure," Gord remarked. "We can go in there and ask for this James McElroy."

A small door in an L-shaped wing opened abruptly, and a young man of about their own age stood framed in the doorway. He peered out at them anxiously.

"WE ARE looking for a man named James McElroy," Wia Rustum told him.

"I am McElroy." The man's voice shook with excitement. "Are you—?"

"Yes," said Gord gravely. "It seems that we have both been sent to visit you."

"Come in! Come in!"

He beckoned them into a room that reminded Wia of reconstructions of primitive architecture she had seen—a sort of ancient office, with a desk and filing cabinets and chairs, to which McElroy waved them fussily. They sat down gingerly, but the chairs were more comfortable, in spite of their odd shape, than either of them had expected.

"You won't mind, will you," said McElroy, "if I make a record of our conversation?"

"Of course not," Wia answered politely. Gord only nodded, perplexed; in his experience, records were always kept of all conversations, however trivial, though he wondered how the primitive machine standing against an inner wall was expected to work.

Their host sat down at his desk. He seemed hardly to know how to begin.

"Are you all that are coming?" he blurted.

"All?" Gord echoed. "I know only that I myself was sent to you. I met this young woman just outside here, and it appears that she too has been sent."

"Then you're not both from the same approximate time?"

Gord laughed.

"Hardly. I am as far from her in time

as she is from you. You should see the obsolete object she traveled here on, and has hidden in your grounds. It's a wonder to me that she could travel ten years back in that thing."

Wia Rustum flushed.

"It's a very fine traveler," she said defensively. "Why, it's an enormous improvement on the first ones, only twenty-odd years ago."

Gord felt the pocket-sized traveler in his jacket and concealed his smile.

McElroy was watching them intently. His hands were shaking, in some almost unbearable agitation, but he was getting better control of his voice.

"You must both be utterly bewildered," he said. "Unless you have been told all about this?"

They both shook their heads.

"All I know," said Wia, "is that ever since I can remember I have been told that on my twenty-fifth birthday I was to make a journey back to 1970 to see a man named James McElroy, at the International Association for the Advancement of Science."

"I also—at these headquarters, on Earth," Gord agreed. "The guardians said that was why I had to learn to speak twentieth century American English, and study your history and geography and customs, though I was not in training to be a Terrarchaeologist. I had lessons with Kel 87459X2ZA himself," he added proudly.

"I don't know about any guardians," said Wia Rustum, "but I had a special World Government Council scholarship right through school, and the famous Harduk Bal, who excavated this very site in 4016, gave me my final instructions only a week ago."

"In 4016!" McElroy exclaimed. "And what year is it now, in your time?"

"Why, 4042, of course."

"And in yours?" he asked, turning to Gord.

"This is Year 117 GM—of the Great Migration—or, according to your calendar, I suppose it would be 5917."

MCELROY gaped at them. He seemed overwhelmed. In a dazed tone he said to Wia: "And you say time-travel was discovered only in your own lifetime?"

"The first short trips were made in 4020."

"I see. So any earlier—tell me, has either of you any message for me, from a time earlier than your own? Probably you, young lady—good heavens, I haven't asked either of you your name!"

"I am Wia Rustum. You may call me Wia, James. Yes, I was told to say—but maybe Gord has a message too."

"Gord 20977F8EN," the young man introduced himself belatedly. "Call me just Gord. Yes, I was given a message also, but I was told it would be unnecessary if any traveler from an earlier era should be at the meeting. Was yours about somebody named Mark Iverson?" he asked Wia.

"Yes, it must be the same."

"You give it, then."

With the air of one repeating a lesson learned by rote, the girl recited:

"In 2150, a committee of the IAAS, in charge of tearing down the old buildings and erecting new ones, discovered the tape-recording and followed instructions. Mark Iverson was born the following February. Means of travel into the past had not yet been discovered, and so it was merely added to the record that this child was born but that he died at the age of five when a Moon-plane on which he was a passenger was destroyed in a collision with a meteor."

James McElroy closed his eyes for a moment. His face was white.

"Another!" he muttered. "Little Jim—and Adela—and now this child."

He took a deep breath.

"Tell me," he asked Wia, "did your message say if the child's mother was with him—and who she was?"

"How would anyone know that?" Gord interrupted. "Oh, yes, of course—in that age—"

"No," said Wia, "that is all I was taught to say, and I haven't the slightest idea what it means. Did you have more than that in your message, Gord?"

"It was just the same. But I do remember once asking Kel what tape-recording they were referring to, and he said it was one he found in the old World Government Center in London, here on Earth, and that it was now safe in the archives of the Interplanetary Congress on Skyro."

"At this moment, it is in the vaults under the IAAS buildings, right here," said McElroy. The color was coming back to his face. "I wonder how much it has wandered, up to your time, Gord—and where it will wander afterwards?"

"So now three vials are accounted for, and the other two must have been lost or useless, or else I would either have more visitors today than you two, or your message would be longer."

"I know I'm trying your patience. None of this can make sense to you. Please bear with me just a little longer, and then I'll explain as well as I can. I don't suppose," he added wistfully, "that either of you could tell me anything in detail about life as you know it in your respective times? No, don't bother to answer. I told my colleagues only last month why that would logically be quite impossible."

"But perhaps you can satisfy me on one point. I noticed, Wia, when you gave your message, that you spoke of 'travel into the past.' Does that mean that time-travel is all one-directional? Can't you go forward into the future?"

Wia looked at Gord. "We can't," she said. "Can you?"

"No, and I doubt if men ever will. I could tell you why—it's elementary mathematics. But unless you're familiar with the Moitier Concept discovered in your Year 3845—"

"And the Gregi Correlary of 3907," Wia added.

McElroy smiled.

"I'm not a mathematician," he said, "and even if I were—" He shrugged.

"Well, that question was for the benefit of my colleagues, particularly of my friend Wycliffe. I imagine I'd get the same kind of answer if I queried you about Moro's specialty, or Schultz's, or Wong's, or Kemet Ali's, or any of the others. We can't change history by altering the past, though I do wonder why there was so long a gap between Mark Iverson's birth and yours, Wia."

"Well, of course the Second Dark Age came in between—"

"Better not, Wia," Gord warned her. "I know what the Interplanetary Congress would do to me if I tried to scramble up history by leaking it into the past."

Wia looked frightened.

"Don't worry, Wia," McElroy said reassuringly. "You haven't said anything that could do any harm. We in 1970 have been prepared for a quarter of a century for the onset of some such interregnum. In fact, we've expected it much sooner than, apparently, it will arrive. And plenty of us also have the faith that civilization will revive and go on to greater heights. You and Gord are both evidence of that—in more ways than you know."

"Now if I may ask you both just a few more questions, I'll solve the whole riddle for you. You, Gord. Can you tell me about your mother?"

"MY MOTHER?" Gord knit his brows. "How would I know about that? I'm just like everybody else. I was produced in my local Genitorium and reared in my local Pedenid. How would I know which particular ovum gestated me, any more than I would know which particular sperm-cell activated it? All I know is that I must have a bit of native Martian heredity, since I have superexpansible lungs, and the Martian stigmata on my spine."

"I see," said James McElroy slowly, gazing at the young man with a sort of baffled wonder. "So in your time all children are laboratory products, are they? No haphazard breeding—the geneticist's dream come true! Don't you have any

sex life at all?"

Gord reddened angrily.

"Naturally I have," he said in an offended tone. "I'm twenty-five years old today. I'm a perfectly normal human being. I've belonged to a sex group since I was eighteen, like any other man. But you can't mix up sex and reproduction. It isn't civilized!"

"We do," McElroy answered dryly. "And you, Wia. Did you come out of a test-tube too?"

"As a matter of fact, I did," said Wia, looking surprised. "How did you know? I mean, my mother was one of those selected for controlled eugenic maternity by the Biogenetics Laboratory. But naturally I know who she is—in fact she reared me until I formed my first love-union, and I never was sent to a nursery. I live near her now, and I see her often; I said goodbye to her just before I left on this time-journey."

"But I do agree with Gord on one thing. I don't want to be rude, but it does seem terribly dangerous and rather disgusting to let just any woman have a child by any man. We don't do that even in direct parentage. How do you know they have the right kind of heredity?"

"We don't," said McElroy mildly. "I'm a geneticist myself, Wia, of an antique variety. I'm not denying that our science and our culture are far behind yours. As far, perhaps"—a bit of malice spiced his tone—"as yours may be behind Gord's here. But let's not wrangle over our comparative social mores. Tell me about your mother. What is her descent? For instance, of what nationality is she?"

It was Wia's turn to flush in anger. Her dark eyes flashed.

"If you're implying," she retorted, "that I'm a monogene, it's an outrageous lie. If you're any kind of geneticist, James McElroy, you know perfectly well that one can't parcel out the chromosomes like so many building-blocks. I may display more of the characteristics of one of the ancient races—the one

they called white, I suppose, to which you seem to belong—than of the others; but I can assure you that, whoever my father may have been—and that, of course, I can't know—my mother has her Class A certificate attesting that her ancestry includes every one of the civilized types of mankind!"

"Didn't they teach you about this age we're in now, Wia?" Gord intervened sarcastically. "In this era they *avored* monogenes. You were penalized if you had even a trace of interracial heredity. I can't imagine what they would have done about my trace of Martian—except that they hadn't even reached Mars yet!"

"No, the Moon's as far as we've attained to," said McElroy placatingly. "And please believe me, Wia, I didn't mean my question in a derogatory way. I'm—I'd like to know a lot about your mother—I'd like to know about Gord's, if he could tell me, because—

"Oh, Lord, let me try to tell this in the simplest way I can.

"In August, 1952, at a meeting of the British Association for the Advancement of Science—there were still separate national associations then, instead of one International, as now—a Dr. Parkes reported on a new method of freezing germ-cells, by the use of glycerol. The cells were quick-frozen to minus 79° Centigrade, and though crystals formed, the glycerol crystals did not crush the cells, as those of other freezing media had done. In consequence, less than ten per cent of the cells died, and the rest retained vitality and fertility for an indefinite time, so long as they were kept at the same temperature. Do you follow me?"

"Of course," answered Wia. "We employ a more refined technique of the same sort. It is used to preserve the sperm of superior and distinguished men, to be used as sires for eugenic maternity. In fact," she added with an embarrassed laugh, "I have always dreamed that I myself—"

McElroy looked embarrassed too.

"And you, Gord?" he asked.

"We have a much better method, but naturally I understand what you mean."

"Well, we too began to employ this method experimentally soon after it was announced, and it worked. But we had used it only for short-time experiments, and mostly with animals."

VI

GORD glanced inquiringly at Wia. "Don't you remember?" she whispered. "In this time, they still had all kinds of living animals besides man—natural ones, not synthetics." "Oh, yes. I'd forgotten," he said. McElroy went on.

"Where I differed from the others was in the fact that I believed firmly in the ultimate discovery of time-travel. Without that, naturally there was not much point in conducting experiments which would extend beyond the probable span of the lives of the experimenters. I don't know exactly what your life-expectancy is—"

"About a hundred years," said Wia.

"Somewhere around 150," said Gord. "Ours today is in the late seventies.

"But, I reasoned, if the cells could be kept frozen for hundreds or even thousands of years, and if meanwhile time-travel into the past could be discovered, then it would be possible to prove the practical immortality of the human race. There were other important scientific correlaries too, but this alone justified trying it."

"But how could you keep up a temperature of minus 79° Centigrade—we don't use that scale but I gather that it is very cold—long after the people who first prepared the cells were dead and gone?" Gord asked.

"In the Antarctic Continent. The IAAS had a concession there, where vials of sperm could be deeply buried and the site marked. It will be countless centuries before that ice will begin to melt. I made a tape-recording, with full instructions, and placed it in our vaults here. If it were found before time-

travel, then the results of the experiment were simply to be added to the recording. My idea was that eventually, as the ages passed, these buildings would fall into ruins, and some day the vaults would be found and opened.

"I find from your message, Wia, that actually the first time the recording was reproduced was less than two hundred years from now—I hadn't thought of our headquarters' becoming obsolete and being rebuilt. But obviously, after that, somebody did find the recording in the ruins of those new buildings and you, Gord, said that in your day it was found in London and is now on some planet outside the Solar System.

"Are you beginning to understand?"

Wia found her voice first.

"You mean we—"

"You two—and Mark Iverson."

There was a stunned pause. Then Gord said tautly:

"Will you be so good, James McElroy, as to describe to us the men whose sperm-cells were in those vials?"

"There was only one man," answered McElroy almost inaudibly.

"But then," Wia exclaimed, "that must mean—Gord, you and I must be half-brother and sister! And that little boy back in the twenty-second century—he was our half-brother too!"

"Yes—you see, I—" McElroy began. Gord interrupted him, his face white with rage.

"How could you?" he cried hoarsely. "How could you upset our entire genetic pattern, on which our civilization and even our continuing existence are based? We don't indulge in slapdash parenthood the way you people did back in your barbaric age. Our births are all carefully calculated to produce just the right number of each type of body-mind needed to maintain a balanced economy. With all the completely unknowable characteristics of a haphazard man of your era, how can the resulting child be sure of its abilities and potentialities?"

His voice shook, and his face was a mask of fury and despair.

"YOU DID THAT to me! And my own people let it happen to me! My own guardians knew—they've always known—that I was a freak. For the sake of some frivolous bit of scientific knowledge, they let me be created a different being from anybody else in the world. They trained me for this idiotic journey back in time, so that I might hear from your own lips just what you had done to me!

"And now I am to go back home, my purpose fulfilled. And what is my life to be from now on? How is anyone ever to know what I am best fitted for, what my place is in society?

"I don't know what your future will be like, Wia Rustum." He turned savagely on the girl who stared at him wide-eyed, her dark face bloodless. "We aren't concerned with brothers or sisters. For all I know, any girl in my sex group might be my sister, though it's not likely—and what would it matter? None of us is ever born except from a regulated union of ova and sperm, and only the best of us are ever selected to contribute our own cells for reproduction.

"None of us but me!" he concluded bitterly. He jumped to his feet and glared at McElroy.

"But I—" McElroy began weakly. Gord snarled at him.

"I congratulate you on the success of your experiment! I can't wait any longer to find out what plans my Chief Guardian has for me next!"

He put his hand in his pocket and pressed a trigger.

The next instant McElroy and Wia Rustum were alone in the room.

McElroy buried his face in his hands. A soft hand touched his shoulder. He looked up at Wia's compassionate face.

"Don't feel bad," she murmured. "I know you didn't mean any harm. They'll calm him down. Surely, if their culture is so advanced, they wouldn't have let him be produced only as a—"

"An experimental animal?" His tone was as bitter as Gord's had been.

"I suppose so. They'll fit him into the normal life of their time, I'm certain of it."

McElroy shook his head.

"And what about you, Wia?"

"Don't worry about me. They've always told me that after what they spoke of as my 'twenty-fifth birthday project' I could go on quietly with my own life and my own work. I have a very good job with the Council of World Government," she said proudly.

"And aren't you too horrified at the thought that your father is one of us twentieth century barbarians?"

"It is an upsetting thought," she replied frankly. "But you've told us you are a geneticist, and primitive as genetics must be in your time, I'm confident you wouldn't have used cells in your experiment that came from a defective man."

Her voice grew coaxing.

"I don't suppose you could tell me, could you? Really, we're not nearly so fussy as Gord's people seem to be. Naturally, we don't let just anybody who wants to, have children. But lots of women have them by men they actually know—if they can get certificates on both sides, they often have them by their own love-partners." Her face fell. "In fact, Tir and I were planning—well, now, of course, we'll have to give that up; I see I could never be certified."

"So I've ruined your life too by my rash experimentation, have I?"

"Nonsense," said Wia stoutly. "I don't live in a one-track world like my dear half-brother! I've got Tir, and my work, and plenty of other interests."

"But just the same, I wish you would tell me. I'd promise never to let my mother find out. Women who are chosen for eugenic maternity would always rather not know."

"Tell you what, Wia?"

"Who my father was, of course!"

McElroy's face was a study. Before he could find words, Wia forestalled him.

"Oh, Great Radiation! How stupid of me! Of course! I see it all now. If only

that silly Gord had waited till you could make him understand!"

"I'm afraid I don't understand you myself, my dear."

"Certainly you do. You don't need to pretend. I'm not always as dense as I must have seemed just now. Naturally, for a momentous project like that, there was only one thing you could have done."

JAMES McELROY'S heart, which had ached for seven months, suddenly throbbed with joy. He smiled at his daughter, who, in this strange meeting, was of exactly his own age.

"Then you don't mind, Wia?"

"Mind? I should have known I could trust you. The idea of Gord's saying that you had made a freak of him! Did he think you picked out just anybody at random to become our father? It must have taken you months or years to decide on the man with the very finest mind and the best body alive in your time. Whom else could you have chosen, with the very lives of future beings at stake?

"That's all I need to know about my father. I'm not interested in his race or nationality or whatever you call it, or his age or what he looked like. That hot-headed Gord! He got himself so wrought up I honestly think he'd have believed any silly balderdash you told him." Wia laughed merrily. "Why," she went on, wiping her eyes, "he probably would have believed you if you'd told him the most ridiculous thing you could think of—even that you yourself were the man!"

Her eyes were mirrors of innocent candor.

"Then you wouldn't consider me a—
a good eugenic specimen, Wia?" McElroy asked painfully.

Wia sobered contritely.

"Oh, dear," she apologized, "that wasn't very polite, was it? But really, James, don't you have mirrors in your era? You seem about the same age as Gord and I are, yet even with your smaller life-expectancy, I can see that you're going to be prematurely old. Why,

look, there are grey hairs at your temples. And you seem unable to see without that glass thing across your eyes. Besides, I noticed right away how unstable you are emotionally.

"I'm sure," she added courteously, "that you have a fine mind. You must have, to have thought of this whole thing in your primitive era. And you must be forward-looking, or you wouldn't have believed in time-travel when other people didn't. I like you very much. But naturally, as a geneticist yourself, you would hardly select yourself as the best possible ancestor for anybody, would you?"

McElroy smiled with stiff lips.

"You're very perspicacious, my dear. I hope you won't ever regret the father I did pick out for you."

"I shan't. And don't worry about Gord, either; he'll get over his shock. Anyway, neither of us will ever have children of our own now. And that other little boy—Mark Iverson—died when he was five. So the line ends with us, and you can set your mind at rest."

She took McElroy's cold hand in her warm one.

"Paternity means a lot to people in your time, doesn't it?" she said sympathetically. "More than it does in ours—or maternity either—and much more, evidently, than it does in Gord's."

"Look, James, I know how you're feeling. You must feel responsible for our existence, Gord's and mine, almost as if you really were our father. Don't. We'll get along all right."

"Do you know what I think you ought to do? I think you ought to have a child of your own. I'm sure you're as good a potential ancestor as lots of people of your time, and any defects you trans-

mitted would be diluted out in the generations after you. Have you any children already?"

"I had—I had a son—but he was killed."

"Like poor little Mark Iverson. Well, have another."

"His mother was killed with him. We—I loved her very much."

"Oh, I'm sorry. But even so—oh, I forgot; you people are sort of monogamous, aren't you?"

"Sort of." To his surprise, McElroy found himself smiling faintly.

"Then perhaps—don't you think you might find someone else you would want to have a child by? I'm afraid that's a clumsy way to put it; your customs are so unfamiliar to me. But I do feel you're the kind of man who ought to marry—isn't that the word?—and have sons and daughters of your own again."

"You may be right, Wia. I hadn't thought of it that way. Thank you for coming today. I feel my whole experiment was justified by its producing you."

"What a nice thing to say! I've liked meeting you too, James. I don't expect they'll want me to come to see you again, but I'll never forget you. Neither will Gord. And think about what I said, won't you? Why, just think, if you take my advice today, I may know some remote descendant of yours myself!"

He took her hand.

"Goodbye, Wia. I promise you I'll think about it."

He stood at the door and watched his daughter stride across the lawn to the bushes where her time-travel machine was hidden. There were tears in his eyes, but his heart was strangely light.

NOW IN PREPARATION — THE BIG 1953 EDITION OF

WONDER STORY ANNUAL

WATCH FOR IT AT YOUR FAVORITE NEWSSTAND!

THE ETHER VIBRATES

(Continued from page 6)

reply, wrote out its instructions to take the number of marbles it had decided upon from the group it had selected. In about four moves it was obvious the machine had won. And it won all the rest of the games.

"It is entirely possible for a human to win," Dr. Lubkin explained. "But in order to do so he must start by making a correct first move and then he must make every following move correctly. He cannot afford to make a single mistake because the moment he does he has lost the game. The machine makes no mistakes."

We had a question, "In a game with so many combinations, there must be more than one correct choice at many points. How does the machine choose the one move it will make?"

Does It Think?

Well, we got an answer. But we went down for the third time about halfway through it and the best we can do is to reproduce the essence of it as we remember.

"The machine computes all the possible combinations for *every* move," Dr. Lubkin explained. He was very nonchalant about the fact that there are so many thousands of combinations that it staggers the imagination and that the machine does all his computation in about three seconds. "Where several choices are possible, it is quite capable of selecting the one which seems the most direct route to its goal."

"Isn't that thinking?" we asked.

"No. It looks like thinking, but it is not. It is computation, not thought."

Having built it, he should know. But feats of computation, amazing facility in adding or calculating—this we expect from a machine. None of this scared us so much as the sight of it playing a game with a human opponent. Watching the lights scamper over the panel, listening to the typewriter clack out its instructions, we found it impossible to fight down the thought of a huge and powerful brain lurking behind the steel doors. It was just a little bit chilling.

Built-In Memory

Later, over corned beef sandwiches and cokes, we cornered Dr. Lubkin and made like a fan. "The publicity," we reminded him, "says that the machine has a memory of 102,400 words of

nine decimal digits each. How do you build memory into a machine?"

"Simple enough," he said. "If you send an electrical impulse of a certain pattern through a wire, it passes through and is gone. But suppose you send another through on the heels of the first and another and another—continuously. Suppose you bring your wire around and make a complete circuit out of it and keep this impulse going through it continuously. You might say then that the pattern exists simultaneously all through that circuit. This is equivalent to memory. Any new impulse coming through must then be matched to that existing impulse, which can 'recall' it by accepting or rejecting it."

That much we could understand, at least in theory.

"Could the machine be taught to use words instead of numbers?"

"Easily, as it is already using some words. But it would have to be a very basic basic English, for most of our words have about nine different meanings and the machine would not be able to hedge-hop among them like a human. It would have one fixed interpretation for each word."

The \$64 Question

Then we asked the \$64 question. "Dr Lubkin, science-fiction writers, carrying the conception of these machines on into their future development, depict them as having achieved actual consciousness. Do you think they will?"

"No," he said promptly. "They compute, they don't reason. I don't see how they can develop consciousness."

Think or not, Elecom 100, the first of its type, is on its way to Aberdeen Proving Grounds, having been purchased by the Army to solve problems related to fire control in artillery. A mathematically inclined Lieutenant from the Army was present at the demonstration to explain the Army's interest in the machine. It is just big enough to handle certain problems which are not vital enough to join the waiting list for the really big computers but are too much for human mathematicians to spend months over doing the required computations.

An improved model 110 is now being assembled and special designs to handle specific office

problems for business, such as magazine circulation, will be available. The price? A mere \$62,500.

"Will Elecom do everything the big machines will do?" Dr. Lubkin was asked.

"Yes, but slower. That's why the really big jobs will wait for the big calculators, but the waiting list is months long. This one will handle the medium jobs which wouldn't get to the big machines."

We emerged from Brooklyn feeling that we had had a foot inside the door of a world hitherto described only in our own magazines. These men we had been talking to were not writers or science-fiction fans. They were hard-headed realists who were investing money in an enterprise they hoped to see prosper. It was an enterprise to sell American business men as science-fiction-y-a gadget as we had ever seen. It was just a little bewildering. We liked it.

ETHERGRAMS

AHINT of treachery has crept into what we fondly supposed to be a mutually trusting correspondence between ye fans and ye ed. Some of you characters have been sending us three, four and more letters per issue with the result that we have to check like mad to keep two letters from the same person going into one column. We lost track of letters from Wally Parsons and Hank Moskowitz long ago, seems like two or three come in every day. And a certain Gregg Calkins who shall here be nameless—we understand he's bigger than us—and even Snarly Seibel, who had people actually asking for him, turned up with two letters this month. And Dave Hammond and J. T. Oliver bombard us with postcards crammed to the edges with words—restrain yourselves, willya?

AND VITAMINS

by Peggy Lindemann

Dear Mr. Mines: I'm slightly astonished that anyone should be astonished to read "that the rich get richer and the poor get—children".

Meininger suggested that it might be the emotional satisfaction which the having of progeny gives to the unsuccessful. Durham points out, in "Man Against Myth" that most social myths are arguments either that the status quo is desirable, or that it is unavoidable, and gives as one instance the frequency to which allusions are made to the tooth and claw methods of preservations by species, and the not so often quoted, but obviously commoner, mode widespread method of prolificacy

(Is this a word?). Do you think it possible that all species of animals tend to have larger families when they are underfed? Has anyone ever tested the possibility?

I think Mrs. Colby a bit wrong in saying that religious people—does she mean only Catholics?—have large families because of fear of their religious mentors; these people believe that "artificial" methods of birth control are displeasing to God, I suppose it would be heavy as stealing on their consciences. Although I have heard many religious young women, after their first few children, decide that one or another means is ethical enough.

People also seem to have the peculiar notion that hungry people are dangerous. Now, a man who is used to eating reasonable-sized meals may be dangerous when he doesn't get them, but if there are any cases in the history books of underfed peoples engaging in wars, I just haven't heard of them.

There are the Japanese, but war does not now seem so natural to them as to the Germans—at least the Germans seem to have had a little more choice of leadership.

Of course, it has been only a short time that man has tried to use the scientific method to study himself. To me, it seems that anthropology has taught us more than psychology or sociology, but that as in other studies, what man learns about man should increase by an upward spiral. I am sure that a few hundred years from now, no parents will be allowed to whip their children, that no parents will be allowed to take the consequences of their children's misdeeds—but how to keep them from killing themselves?—that children will be reared in almost child-proof environments, so that they are unable to kill themselves accidentally. It seems likely, too, that children will be allowed to visit relatives or friends indefinitely at will. Also, that educational methods will be far, far, different, and that democracy may spread to the conduct of business, as well as schools.

I think it possible that marriages will have to be renewed, by proof of compatibility, and that married couples who do not seem to be happy with each other will have to agree to psychological reconditioning—that marriages will be difficult as divorce is easy, although I rather think marriage is here to stay. And that divorce will be less frequent than it is now, because men and women will be more friendly with each other.

And I feel sure as sure that science will find some faster than light transportation with no feeling of acceleration, no more than we feel from the Earth's, without having to double talk for Einstein.—*Seaside, Oregon*

Deleted was four pages of a slashing attack on the mythology of theology—let's keep it clean. But orchids to you, Peggy Lindemann, for the first original idea of the decade. It should be made difficult to stay married, we agree with you. Just as the state of New Jersey requires all motor cars to be checked twice a year for safety, marriages should be checked every year or so and if people are not getting along they should be reconditioned or forcibly separated. What an idea! Does Kinsey know about this?

SINCERELY

by M. McNed

D'red:

horrible way to address someone
i read in the last
issue that u don't want verse letters

ohhhhhhhh

ohhhhhh

ohhhhhh

ohhhh

ihh

h

also o

it had to happen it was fated to happen
a bad ish of SS)) (raised eyebrows (they wouldn't
fit in eyeside up))

eghod

cover; very lousy, bergeyish cheesecake

popp should go back to wherever he comed from
i repeate? eghod

the stories were a rather poor attempt to write slick
fiction (eetek, i wasn't going to punctuate)

selfconscious

freemam; i cant say what i want to say about u
i rerepat; eghod—2010 McCleod, Houston 25.

Texas

Oh no ohno no nononono

what's

verse than verse?

Blank blank blank

they whom the gods
would destroy they

.first

drive into fandom

beware

CALLING ALL INTERPRETERS

by Nancy Share

Saludos, Sayam! Ja, mein liddle flower 'Tis I again. This time I have a special purpose for writing to you. Since you already know how I feel about your selection of stories, I won't go into that at this time. I proceed to enlighten you—all Sam—, are you a lot, or are you a little??!! (Plenty—Ed.)

To wit:

Will you, fair flower (I've been reading too many Pearl Buck books lately), please give me some space in one or *two* (I'll get it right yet!) two (yippee made it!) of yo mags for a little advertisement?? No, no, don't search eagerly thru this envelope because there ain't no money in it. In case yo ain't already guessed it ... I wish to have "free" (there is such a word?) space? Yes? Stop protestin' I can't hear ya anyway. You'll give me some free space? How nice! I blink my eyebrows at you! (I really can, you know) Now follows the ad:

I'm co-editing a new all artzine (PENINK) with Racy Hign. We need material muchly and quickly, so would any fan artises who can do good work please contact me? We want all illos to be full page (on regular 8½x11 paper) either in ink

STARTLING STORIES

or pencil . . . and can be sent already stenciled if the artist prefers. If any of you artists reading this ad want to see your work in a good zine, contact me as soon as you can, for we want to have this zine ready by the latter part of September or early in October. (Hey Sam . . . lookie at me! I'm an editor now too!) We awesome characters ought to get together . . . can you draw? (Would we buy Finlay if I could?—Ed.) I'll even accept some of your illos if they're any good! Indeed I will! End of ad. See . . . it wasn't asking for too much space was it? I was going to make it longer, but I figured you might want to put a lead novel in the mag, so I chopped it up some.

After seeing the results of that letter of mine you printed, I hereafter will highly recommend all spinsters to send in letters to you and your mags. They shall be spinsters no mo if you print their letters. I got proof. You should see the proposals I got from mes (I think that's what they were) who had read that letter you printed (Sam . . . I want five bucks back that I gave you to print that letter). When you print this one (O, you is, ain't you??!!) sign my real name to it (which just happens to be Mae West) will ya? Fine. Well, I have entertained you long enough . . . so I shall quietly fade away to the place where all those old soldiers are always going (Are you an old soldier too?)—P.O. Box 37, Danville, Pa.

Egad, are we running a matrimonial agency now? If you think you got proposals on the first letter, what do you think is going to happen with a letter signed Mae West?

HUNGER AND SUCH

by Richard Harter

Dear Sam: What are you trying to do—be the best mag on the market? Such issues as the August and September ones make you definitely the leader in SF.

Some of your readers doubted that 'hunger caused overpopulation'. The book "Geography of Hunger" deals with this subject. In it somewhere is a list of nations, their birthrates and their protein consumption. As the protein consumption goes up, the birthrate goes down and vice versa.

Also after a careful study of the distribution of population you could make the claim that every nation in the world is UNDERpopulated. Take China, for example. It is an AI example of a mal-distributed population. In certain areas it has the highest population concentrate on earth, yet most of China is practically an unsettled land.

The reason of course, is a cultural one. Usually the culture is set so that it only intensifies the hunger. Thus, regardless of how few people there are and how much land there is, they will starve. Starving in the midst of plenty, they call it.—Himnatur, S. Dakota

Credit an assist from Harter—this is exactly what we said in our editorial. Which, incidentally seemed like a fairly important piece of information to us, but has caused no earth-shaking reactions that we've been able to discover so far.

ENERGETICALLY YOURS

by Wally Parsons

Dear Sam: I just started to reread TEV (August) when I came upon a letter by R. W. Durham. I think your explanation of the rocket principle will still leave him somewhat confused. You neglected his idea of a sucking action of a vacuum. So I shall explain. (ahem!)

Energy flows from a high potential to a low potential if the two potentials are connected by a suitable conductor. Witness the effect of joining the terminals of a dry cell with a piece of copper. Or raise a twenty pound body through ten feet. You exert two hundred foot-pounds of energy. Release the body and it will release the two hundred foot pounds of potential energy in falling to its former position.

Expanding gasses leave a rocket tube because they have greater pressure than the surrounding pressure (in space this is zero.) Thus you have your action and reaction sets in. Try this: take a U-shaped glass tube, hollow, open at both ends, each arm separated by a valve. Fill each arm partly with water to a different level. Open the valve and observe. You will see the pressure in each arm equalizing—high potential in one arm low potential in the other. That's why the vacuum doesn't nullify the effect of expanding gasses.

Since this is not one of my usual six-page letters maybe it will see print, eh? Anyway, I thought I'd show off my third form physics a little.—73 Sprucehill Rd., Toronto, Ontario

So a seven page letter heads for the waste-paper basket. How many'd you send in this month—three or four? Thanks for the erudition. Only nobody asked you why the gasses come out the rear end of the rocket, they asked you howcome they push when there's nothing to push against?

SEIBEL FOR ALL

by Ken M. Butland II

Dear Sam, Ed, and all other editors: This is to inform you that your cause is lost, forgotten, buried and cremated. I've decided to join forces with the Smarler. Who am I? Nobody yet. But with the (bulb? what a handwriting—Ed) on my side how can I miss?

This boy Seibel is on the ball, I'm sure you agree with me.

Well, I must retire now and start thinking up irks for you next month. Goo-by.—8107 Quoit St., Downey, Cal.

Sure agree with you that he's on the ball—the trouble is it's the wrong ball. Alpha Centauri would be about right. Wait—what is this? Two letters from the Smarler himself. He's in the Navy. The mood seized him one day, so he up and enlisted. Somebody better tip off the brass before the whole seafaring establishment is disorganized. Anyway, he writes to rave about THE LOVERS (your very first baby

rave Smarly?) saying, quote: "If you'd published stories like this before you wouldn't have had nasty old me flagellating you half to life." Gadzooks, imagine our embarrassment at being forced into the position of having to agree with him!

ANCHORS AWEIGH

by Smarly Sabretsooth Seibel

Dear Slice: I happened to wander across one of your favorite magazines while I was in the big city of Oklahoma City this weekend. (What ocean is that on?—Ed.) Purely accidental, you understand. I didn't go in search of a bookstore, enter and dig around in their copious piles of literature for the sole purpose of reading the October issue of STARTLING.

I see I am being received with enthusiastic applause by the admiring hoards. Gifts are being cast at my feet; I have a new .30-30 rifle, in a short time I can start a lead mine on the land behind me (they won't all miss—Ed) and soon I can build me a mansion of bricks. I feel flattered that my name was mentioned, far more in your magazine than any other name.

Now of course I can't please everyone. A small few but yet notable contributed their irritated replies to my letter. First of all what business is it of yours what I say? The letters are to Sam and if he sees fit to print them is it necessary for you to have a fit? I met no arguments, only anger. I cannot reply to anger for there is no reason behind it and I am a reasonable man.

A woman's being unreasonable and pitifully illogical and emotional I can well understand. It's an inherent weakness of their sex just as much as their enjoyment over their prowess at captivating hapless males. But a man's being so I cannot understand and therefore their reaction and behaviour is a reprehensible thing that they should fall to a chattering, mindless woman's level.

Ah, but do not misunderstand me. I am far from being a misogynist. There is no pleasure greater to me than a woman's company—but only if she is a woman and not a scatterbrained child. Perhaps you will press the point as a contradiction but a look at facts will prove such thinking false. I will not give you those facts if you do not know them, then you are sexless and therefore do not need them, nor are interested. (huh?—Ed.)

It is a waste of time to tell a fool facts because he or she will ignore them and continue on an erratic course. I have dwelled too long on a subject boring to me and that is overlong. (names—Ed.)

What was that about me defecating a ream of white paper and offering it for public consumption? I know better than to send you any stories? You give me too much credit then, for I accept the challenge. I can outwrite any author except Kris Neville. And why don't you have him write a story for you? I shall begin and we shall see what public reaction is. All you have to do is publish it, if you have the nerve.

Reading your editorial, it smacks in a few thousand places of sidelong jokes at me. Mind now, it's all only conjectures. I know, I know, (harmonize) IF THE SHOE FITS, WEAR IT.

I am in the process of reading ASYLUM EARTH—you're sure this creature can write? He isn't a Ubangi eunuch you dug up on one of your vacations, is he? He doesn't seem to understand all he knows about. The love scene was about as interesting as the copulation of two oysters. On your dinner plate yet. If you're going to have sex in your stories, at least put a little more realism in it. (Here Seibel goes clinical. Navy influence?—Ed.)

What I want in women is rather rare, in fact I've never met the full combination except in a painting, so I while away my life by suffering chasing women. . .

Come to think of it, Sam, I'll bet more people like me than don't. Usually the people who have a preeve are the ones who write in while those who are satisfied feel no need to do so. I believe there were two who approved of me. I thank you, sirs. You are gentlemen and I am your friend. And don't say you'd hate to have me for a friend, Sam! (Took the words right out of our mouth—Ed.)

You have a nice cover on this issue, Sam. Just keep it up and someday it'll creep all through your magazine. When it does I'll read it from cover to cover. Very neatly portrayed, appealing to intelligence. Now do it for the stories instead of leaving them on a patrescent level of sub-human decadency.

I shall write that story and you'll willingly buy it.

So Steinbeck is "nauseating, depraved and mad" in his portrayal of people? A mind locked behind doors must have said that. I know the people he wrote about and that's the way people are. Try to disprove me—P.O. Box 445 Olivehurst, Calif.

How'd they ever pass this kid for the Navy? They must be trying to lose the cold war. Now he's not only got practically all of the men sore at him, but he's added all the women. What's the old adage about judging a man by the enemies he's made? With Seibel that includes just about everybody. Except Ken Butland. And probably not even him very long. Still we gotta admit we like Seibel ourselves. It's his modesty.

HEROES AND VAT 69

by Dick Clarkson

Dear Sam: Where was Seibel? You didn't have a letter by him in the Oct. 1st of SS. Now, I'd grown right fond of that boy in a tear-his-throat-out sort of way. Now I can't call him names. Wotta letdown.

But to ye editorial. Never fear . . . my ideas of eds and their offices were nothing like that. Or not much at any rate. I had thought more on these lines: All editorial offices have a hard, severe oak desk trimmed with brightly colored rejection slips. There are two piles on top of the desk. One is labeled "rejected" and has two subdivisions—"erud" and "new author". The other is filled with fan letters. This pile is in a box labeled "waste-basket". There is but one secretary, and she would never make Marilyn Monroe jump off her calendar.

The name of the secretary is Marilyn Monroe.

The editor spends his day at important conferences with (1) his wife, (2) fans, and (3) the old Emperor Vat the *Obs*. And stories are NOT bought fifteen minutes before the mag hits the stands. No fan would even think of such absurdity. Why be so slow? Five minutes is better.

But why go on with this? You have dispelled my slightest doubts. What with the prices and all today, you can't afford a hash palace or a gold inlaid desk. The only thing coming down these days is ram, and even that soaks you. But as to s-f editors being nine feet tall . . . why, Sam! I knew you were shy, but then all us Martians are.

May I ask Bairdowsky just what his letter was all about? Here he goes off into great detail about how wonderful Sarge Saturn was, and after a long, loud "let's have him back," he ups and says he don't want him. Now, to my alleged mind, that means nothing or less.

Now, as to the battle (or whatever it might be called) by the by-now-forgotten perpetrators) on great heroes who are invincible and have all the luck, etc., etc. . . . I dunno. I doubt that it's as bad as all that. S-F heroes are only the outstanding type that come along every now and then. Sure, they're out of the ordinary. Sure, they're different than you or I. Why? Mister, how much would you enjoy a story based on a hero who leads the type of life you, or I, or the average "Joe Pham" or "John Citizen" leads? Not much. Pretty dull, I'd say. Who cares what time the average guy eats breakfast? Nobody. But when the hero eats breakfast, you know damn well that something's gonna happen. Why do you suppose that the authors tell a story about this hero? Because he's done something radically different. He's a different type of guy, and does different kinds of things. I know. I'd soon put down a story written about the average guy. But the s-f heroes aren't average; they DO things. That's why they're written about. If the heroes had never done anything important, why, there'd be no story. Savvy?

As to gals scantily clad, and (shhhhhh) (muffle) sex, why, it DOES exist, you know. Sure, you know. Then what is the name of the great green Ghis is all this blather about? There. Let that end it. So be it. Amen.

I see you finally got deCamp in there. Some how, that guy always gives me a bang. And this one was not at all different. Where has he been recently and of late? I haven't seen him—that I remember—since further back (in SS and/or TWS) than I care to mention.

And the letter column was the best since I dunno when, too. Longer than last iss, and long letter columns always satisfy. You have a new format (I don't have to point that out too hard), and only one thing remains. You guessed it. Trim those edges. Change nothing, but trim 'em. Then we'll all be happy. And, ah, Sam . . . there's a fan outside to see you.—419 Kensington Rd., Baltimore 29, Md.

So the Bairdowskys are beginning to get you too, eh? And the Seibels? Confusing, what? As to trimmed edges, I dunno, but keep an eye on the February issue.

NEW TREND

by Tim Haggard

Dear Mr. Mines: Having come all the way with my favorite type of escape reading I feel the need of a letter to the editor for the first time in my thirty years of reading.

I started way back with Gernsback, the first issues of Amazing Stories (when Buck Rogers' first name was Anthony) moved along the space-ops trail with Argosy and Mumsey, staggered thru the thirties with Professor Jamison and his endless adventures, came along thru the glorious nova days when sociology and intelligence crept into sf, and still read most of the magazines.

Now I think I detect another trend—with your group of magazines pushing it, LOVE. And sure enough, a group of fans are yelling.

I can't remember any magazine that seemed to allow sex (or love) to creep into anything but the ending paragraphs, with the exception of something named Spicy Science Stories, which was published for a little while by a house which called itself Culture Publishing Company.

At any rate, I will keep watching to see how this new trend of yours turns out. Our fans seem to forget that a lot of writing has gone into what is now the biggest development in publishing since the end of the war.

Remember, we have lots of new fans. And no one can tell exactly what some of them want. Fans who screamed loudly at the picture "The Thing" never seemed to realize that it was the first SF movie most movie-fans had seen. The slick "corn"—excellent plotting, dialog, and action, probably made more readers than anything in the past five years. Same applies to the "Day the Earth Stood Still".

But my hat's off to you, Mr. Mines. Glad to see you trying something new—even if it turns out badly. Who knows, ten years from now you may be praised at the conventions as the founder of a new style.

I'll be watching to see how you make out. No more letters tho. Circulation figures will speak better than I can. Good luck—Hotel Stamford, 43 West 32nd St., New York 1, N. Y.

P.S. I forgot to say I like your magazines.

Of course there's nothing new about sex—that's the amazing part of the whole business, that it is always greeted with a new furor. But don't be misled; we have no intention of publishing Sexy Startling Stories. As we seem to be explaining endlessly; we are interested in better—i.e. more realistic—stories. If that occasionally involves sex, well this is human nature and more realistic. But no author gets orders to put sex into a story and sex is not what we are selling. Thank you for good wishes.

BREAKDOWN

by Carol McKinney

Dear SM: I just finished reading a great novel, not one that barely carries you along with the plot (often losing you before your interest is really

captured) but one that sends you eagerly ahead, wondering what the magic of words in the next line, paragraph, or chapter may hold for the entranced imagination. I consider it one of the truly great novels in science fiction today and wonder if perhaps there will not be others who feel the same way?

Of course I'm referring to BIG PLANET by Jack Vance in the September issue of SS. Your short introduction did not begin to do it justice; it is, indeed, gorgeous adventure with fascinating incidents and people.

The other three stories were also very good, with OBLIGATION by Roger Dic leading them. All things considered, I will say that I've enjoyed this issue of SS more than any other. If these incredibly good stories and novels continue I know someone who will break down and buy a subscription!

The cover was mediocre, however, and not worth any rave notices. You've done much better in the past.

If there are any fan in the Provo area will they please contact me? In case they're interested in trading sf mags, that is. Also, if anyone else wants to trade by mail please write, no matter how old this issue may be when it gets to you. (Attention: foreign fan!)—385 North 8th East, Provo, Utah

Have been watching the mails breathlessly ever since. Where's that three bucks for the subscription?

KICK IN THE TEETH

by Ancel G. Taffinger

My dear Samuel: No, this is NOT my first letter to a Science-Fiction (please note caps) magazine, but it is the first in which I have been inspired by actual issues to take an editor to task "in the exercise of his official duties".

I am at a loss to account for the bad taste which led you to print "Major Venture and the Missing Satellite" in the August issue of Startling. I read this monstrous parody because I read every Science-Fiction magazine "from kiver to kiver," being one of those freaks who reads some twelve to fifteen hundred words per minute. Thus, if I skip a story, I fail to get my full half-hour of enjoyment from the magazine and, even in these days, two-bits is two-bits. Nonetheless, I found it not only a poor job of writing, but failed to detect any suggestion of humor whatever. In plain language—it stinks!

I hold no brief for Captain Future and Charles E. Frisch may be E. Hamilton in disguise, attempting to get Future's fans off his neck by making the superhero ridiculous, for all I know. Still, even the C. F. stories written by your house names were well-done, well-characterized, well-motivated and, in general, extremely interesting. Any and all types of Science-Fiction have been grist for my mill since my first experience of it—a single installment of "After a Million Years" found in a dog-eared copy of Argosy-Allstory in 1923. (By the way, I've wondered for 27 years how that story came out). I LIKE space-opera, but it must be earnest, sincere and well-written. This Major

Venture tripe has none of these qualities.

Granted that Venture is attempted humor, it is still an insulting kick in the teeth to those of us who looked upon Future as an impossible Superman but an idealistic Superman who used his powers for the benefit of good against the forces of evil. Not that I am an idealist. I am currently working toward a Ph.D. in Business, where there is little room for idealism. Still, there are such things as ethics—

And, while in the vein and the mood, I must take "violent exception to the lead novel THE LOVERS and your editorial in support of it. The exception is not taken to the concept, which is as old as the warnings of the prophets, nor to the language, which to my mind is an effort at pure sensationalism having no place in either Science-Fiction or Fantasy—which this story is. I take my exception to the poor writing which might well grace the pages of Amazing or Fantastic but not those with the usual high standards of Startling and TWS.

As a long-time writer, I well know the difficulties of good characterization. Perhaps Farmer is a new author whom you are nursing along. If so, well and good, but why tout him so highly on this story. As noted before, I read it, but without interest. The characters were wooden and, in large measure stereotyped; the action is obscured by stiff writing and, for me, at least, the author's purpose never became clear. The purpose of narrative fiction is to create emotion in the reader. (See any textbook on writing). This one failed completely. "Warm emotional story—". Maybe to you, as editor, but not here.

For Heaven's Sake, Mines, don't repeat Palmer's mistake and go overboard for something. Just because most of your readers are avid for Science-Fiction is no reason to ram a type or style down our throats. Merwin never printed a single letter which approved St. Clair. Yet, because he liked her stories, we got them. Yours is the responsibility as editor to select stories but "thou dost protest too much when you defend your choices editorially in advance." Palmer soured me and I've never gone back to his former or present magazines. Bixby was wise in getting away from Planetary before Paul Anderson's mimeographed lead stories ruined it completely. I don't want to abandon the Thrilling group because of editorial insistence.

All I'm asking, Samuel, is that you continue to keep up the usual Thrilling Standards, with no more lapses than can be prevented. Just don't try to force ANY stories down our throats with editorial comment.

I know this letter is far too long but I couldn't get it all said in fewer words.—1151 East 60th St. Chicago, 37, Ill.

We had just hauled off to let you have it when we remembered that long before you see this, the November issue will have burst upon the stands in all its glory and with it the crop of letters (only a small part of which we could print) raving madly about THE LOVERS. We will leave it to these embattled few to take care of you. Except for a short word to the rest of you. We recently attended a publisher's lunch-

eon wherein were two guest speakers, Alfred Bestor and Ted Sturgeon. Bestor's talk covered the rise and change of science fiction from the early Gernsback days—material which was more or less new to the book publishers, but would be entirely familiar to you faos. Then Ted Sturgeon got up to talk. What he had prepared, or intended to say, we'll never know. But he spotted us sitting there and he spent twenty minutes raving about THE LOVERS. We hadn't even sent him a free copy of the mag either. From the theme to the writing, Sturgeon, one of the finest writers in the sf field, had nothing but respect for Farmer's skill, warmth and bigness in handling so difficult a theme. When you stop to think about it, do you realize how badly that delicate theme could have been botched? The defense rests.

MATHEMATICS YET

by Ray Capella

Dear Sam: Hoo boy! Popp pops up with a TRIANGLE cover for SS! Things must really be jumping in the ol' editorial-like territory! You daring boy, you. First the change in cover format, now a Popp TRIANGLE!

This may come as a shock, old boy—but I isn't kicking about it because—here now, Mines, come on wake up. "Wake! For the sun, that scattered into flight the stars afore him from the field of night . . ." Ah, that's better.

Sirrashy, no matter what the little peepul may say about this TRIANGLE cover, it is very well done! Master of fact, I'm no longer even kicking about the cover-format change—not since the margin strips are being colored with more *flair*. Will appreciate even more when the right hand strip matches in color with the title-color, as in the August '52 ish.

As for this sex-in-sf er—discussion we're having: Come now, fellow BEMs and assorted little monsters, aren't we being slightly silly? Leave us just take the editorial viewpoint: Sex is sti when it is only an essential, or entirely part of the story. Otherwise, Phoo! on those who put sex in it for sex's sake. I can take an sf yarn with sex in it—have done so—and enjoy it, so long as it follows the above prescription. You said it, Sam!

BUT—Sam, why not apply the same to covers? And if you don't, please alternate between girlie covers 'n sti covers by Schonburg or Enash, huh? I say this, 'cause you dropped hints in the latest TWS about coming TRIANGLE covers. Looking back on sti, I see TRIANGLES all over the field—more than I can bear. 90% of 'em are like that. So . . . let's keep those sti covers that have been coming to us through SS. Personally, I think you've reached the standard set by Bonestell!

And don't tell me you don't have any word on what's done to SS on the art staff! That's a lotta jetwash. Bixby said that to me at the NYCON. I remember he looked rather disgruntled—probably 'cause there was no bar to go with the CON (a reason that left yours truly feeling bad too. You can have a word in the staff—you've been making

changes already!—40 Clinton Ave., Brooklyn 16, N.Y.

What the heck is a triangle cover? We counted four sides to the mag. Doesn't a triangle have three? Might set a new vogue in magazines yet. Like three-cornered pants. Hoo boy.

LOCK THE DOOR

by Mike Chandler

Dear Bureau of Mines: As I crawled from mine cage this murky morning I discovered a copy of SS for September. Wow! Gribambots and zipangotes yet? Oh, Sam, wotta story BIG PLANET is! I rate THE PERFECT GENTLEMAN second. Good plot. In 3rd place THE OBLIGATION (urpl). Last is NIGHT TALK. El Putrid—514 N. St. Kary St., Carthage, Texas.

P.S. Any fans in Marshall, Shreveport or East Texas, please write me!

No beefs on BIG PLANET, which was a joy to read, even to these tired old eyes. But THE PERFECT GENTLEMAN was a writer's story, lad, takes another writer to appreciate the sheer perfection of it. Like Sturgeon and THE LOVERS.

AULD LANG SYNE

by Norman Clarke

Dear Sammy: BRING BACK CAPTAIN FUTURE. Anthologize him, reprint him, give us original CF stories, but BRING HIM BACK!!! The sooner, the better. Charles E. Fritch's MAJOR VENTURE AND THE MISSING SATELLITE made me yearn for my old hero all the more. By the way, that little gem was the funniest sf story I ever read.

Your August editorial regarding the lead novel, THE LOVERS, was the best you've ever written since you took over the reins of TWS/SS. And since your inauguration as king, you've never printed a better novel than THE LOVERS. Terrific story, that. Hard-cover material turns up quite frequently in both your mags.

The novelets and shorts made the August issue the answer to a sfian's prayer. The Berney cover, though, left something to be desired.

I agree with John Brunner 100%. MORE AND GHASTLIER MACHINES to grace TWS/SS's covers—2328 Pine Street, Sraford, L.L.

Okay, stop twisting our arm. If you gotta twist, twist Jerry's arms, they're tentacles anyway and got no bones. I'm glad one Cap Future fan could see there was good clean fun in Major Venture and isn't howling for blood. You want some original CF stories in an anthology? H'mmm.

ORGANIZATION

by Robert A. Flating

Dear Sir: TRIGGER THOUGHTS by Curt

Storm rang a bell and I dug out Durant's STORY OF PHILOSOPHY. In the preface to the second edition Durant says:

"Human knowledge had become unmanageably vast; every science had begotten a dozen more, each subtler than the rest."

He goes on to mention the tremendous advances made by astronomy, geology, physics, physiology, anthropology, archeology, history, theology, political theory, inventions, economic creeds and philosophy. He then said, "Human knowledge had become too great for the human mind. All that remained was the scientific specialist who knew more and more about less and less, and the philosophical speculator who knew less and less about more and more. The specialist put on blinders in order to shut out from his vision all the world but one little spot to which he glued his nose. Perspective was lost. Facts' replaced understanding; and knowledge, split into a thousand isolated fragments, no longer generated wisdom."

"In this situation, the function of the professional teacher was clear. It should have been to mediate between the specialist and the nation—"

Didn't someone say that it would have taken scientists working separately 20 or 30 years to develop the atom bomb? The Manhattan project was a good example of coordination and cooperation under the worst of circumstances due to the need for extreme secrecy.

If this type of organizing and thinking were applied to research in cancer, tuberculosis etc., they would be just as successful.

True, there is more and more exchange of ideas among and within the sciences but as Curt Storms infers, the scientists would be indignant at any attempt at control and interference by an "outsider."

I sympathize with them, but believe it will eventually come about.—787 E. 300, Cleveland 19, Ohio

Happy we are that somebody brought this up—though we haven't read Durant for years we think he rates as a crystallizer of thought, a weeder out of underbrush a man with the priceless gift of making the obtuse seem simple. Well do we remember his matchless paraphrasing of Spinoza and then our own catastrophic attempts to read Spinoza in the original.

A PAT ON THE HEAD

by Roy M. Faulkner

Dear Mr. Mines: Well, you've done it again. Put out a top-notch issue of Startling in this September number. The novel by Jack Vance is the most fascinating thing I've seen in a long time. I have always been utterly bewitched by stories of wanderings—the Odyssey used to be my favorite when a child—and this one certainly took its hero over plenty of territory. The atmosphere and descriptions of the big planet intrigued me as much as the story. Vance achieved an effect of sheer beauty seldom found in a s-f yarn. And those beautiful, beautiful names—Myrtlesee, Jubilith, Tsadonbar, Beaujolais—they are sheer music to pronounce. The whole place seems so real one can almost draw

a map of it. Please put me down for that reservation on the first ship to Big Planet!

Of the other three stories, I think the little short one, *Night Talk* appeals to me most. Then comes *The Obligation*—this one is really outstanding. *The Perfect Gentleman* is cute, but not very thought provoking.

As for the cover, I like all the blood, fire and gore, but I am not so sold on the pop-eyed gal with ex-ophthalmic goitre. Give me the NEW *Berkeley*—anytime. Good-heavens—who'd ever think I'd be calling for that guy?

If this goes on—SS will outshine all the others in the field. One thing—PLEASE don't publish any of those tough detective tales a la Mickey Spillane, only thinly veneered as sf. If I want detective stories I can read detective magazines!

Farewell, with another pat on the head from the great-gramma.—164 *Geneva Place, Covina, Calif.*

P.S. Unlike Marian Bradley, I still have an aching yen to see over the top of the next hill myself!

THE PERFECT GENTLEMAN not very thought provoking? Depends upon what you think about, nicht wahr? Should we have our minds sent out to be dry-cleaned?

THE WOMEN

by Marian Cox

Dear Sam: Being a woman of considerable determination, I'm still actively crusading for more men on magazine covers. James Oggierino, apparently, likes women on the covers. That's his privilege. However, may I point out to him that in his little survey of those who dislike scantily clad girls, he has neglected to mention one rather large group? Women. We have no over-powering desire to see beautiful babes on the covers. A lascivious lassie leering at us from airless space doesn't strike us as being particularly impressive. If anything, she impresses us as being utterly ridiculous. No girl in her right mind would brave the discomforts of a vacuum clad in nothing but a little bit of metal upholstery. (And speaking of discomfort, if you'd like an idea of how uncomfortable those things would be, just try wearing a strapless, boned bra for an hour or two. Go on, Sam—I dare you!)

We poor gals demand the right to be clad sensibly when we appear on covers. Not that we expect you to deprive the poor men of their clothes—just distribute things a little more evenly. After all, why should we freeze, stop breathing, etc., just so the male sex can be comfortable. Let the old softies try flitting through space in their underwear! Let them give up the foolish practice of breathing.

And while I'm on this subject of equal rights for women, I'd like to put in a plug for my newly-formed fan club designed to give women a few equal rights in fandom. It's *THE FANETTES*, and as the name implies, all members are females. We have a zine, *THE FEMZINE*, put out entirely by fem fans. The first issue will have been mailed by the time this letter seen print. The gals who are members have really entered into the spirit of the thing, and expect to have a lot of fun in the club. Dues are 50¢ a year and any further information will be sent on request. Come on, gals,

here's your chance to prove that you're just as good a fan as most of these men who protest so loudly against gals who are fans. And you'll have a wonderful time as well!

The September SS was very good. I enjoyed everything, but one sentence in the guest editorial amused me no end. Says Mr. Leinster, "Nobody needs any longer to be on the defensive for his flair for science fiction." Ha! He should meet my family. That sentence would be retracted so fast your head would swim!

Sam, please give us back the old cover arrangement? And the old type contests page? Please? And what happened to the little line at the bottom of the contents page that kept us poor readers from hounding the magazine dealer to death about the new STARTLING? Let's have it back, please.

Loved that Finlay illo. Why not have more of his stuff?—79th *A.B. Sq., Sioux City, Iowa.*

One reason you can't have more Finlays is that he is the most meticulous worker there ever was. He slaves over each drawing, frequently staying up all night over one. Consequently his output is limited by the rigorous hands of the clock. There's only so much a man can do in his waking hours. Buh-lieve me, we get all the Finlays we can.

We have given a lot of thought (three minutes) to your invitation to try wearing a strapless, boned bra for an hour or two and enthusiastically decline. Even without the natural attributes which would make it necessary and fitting, we still somehow have the idea it would be thoroughly uncomfortable. The metal upholstery, of course, is on the way out anyway, except for them fems as absolutely require it. And judging by trends in the trade, it looks as if it won't be long before fems will appear on covers and on beaches without the hitherto indispensable aid of these appliances. And with that will go the glamour, I bet.

FARMER FAN

by James R. Harris

Dear Sam: A new era has been opened in science fiction and (take a bow, Sam) STARTLING has opened it with a bang with *THE LOVERS*.

I have been reading sf for about 15 years now and without a doubt *THE LOVERS* ranks as the No. 1 story of them all. Sure, I like Bradbury, Phillips, etc., but you can safely put Philip Jose Farmer at the head-of my list of favorite writers.

Take heed, Sam, this *LOVERS* will draw some unfavorable comment, but I'll bet the favorable letters are far more numerous. It is the best science fiction story I have ever read. Let's have more.

By the way, your cover for August was the best you have had in years, a perfect combination with *THE LOVERS*.

On the side—collectors take note—I have several English sf pocket books and also a few British editions of American sf mags which I offer

for sale or trade to anyone. Any fans interested just drop me a line. Let's have another Farmer story at the earliest possible date.—2916½ Hampton St., Asford, Ky.

Is that service? A Farmer story in this very issue. And keep an eye on TWS for MOTHER, a new novelet by your favorite boy.

MOLDILY PHILOSOPHICAL

by Dave Hammond

Dear Sam Mines: I just finished BIG PLANET by Jack Vance. It was as good as I had hoped, and maybe a little better. It was richly colorful, magnificently tipped-in, and really gorgeous. Now, with a few more stories like THAT under his belt I'm looking for Vance to surpass some of Edgar Rice Burroughs' work!

Now don't wrinkle your royal brow, sir. I KNOW that Edgar Rice Burroughs had a trite lot, I KNOW his heroes are dull, six feet tall and grey-eyed without exception, and I KNOW his science is ridiculous, his English poor, and all that, BUT when it came to telling a story, a moving, dramatic, action-filled extravaganza ERB had no peers.

Vance can tell a story and his characters are very real. Just a touch more to settings and impressions and BIG PLANET would have just had the emotional haze around it that make CHESSMEN OF MARS, LAND THAT TIME FORGOT, and AT THE EARTH'S CORE good stories.

So what did I say?

I skip the letter column as usual. No letters there by me, but Marian Bradley mentioned my name, even if unflatteringly; and Joe Gibson mentioned the Philadelphia Science Fiction Society; and Bix, in his personals section, was probably meaning me when he mentioned the initials "D.H."

I'd like to get moldily philosophical right now, or start crusading for some personal thing, or just shoot off my big mouth, but I've gotta stencil the next issue of the PSFS NEWS. My public awaits.—Box 89, Roxanneme, New Jersey

Marian Bradley will have your scalp if you spell her name with an "o" instead of an "a," so I fixed it for you. Just between us—Nothing public about these discussions. Thanks for egoboo on BIG PLANET. Every once in a while we like to run a story which doesn't baffle anyone, but is just fun to read.

GARRULOUS

by Joe Olsen

Dear Sam: Now this Sept. STARTLING I like! —24 Kensington Ave., Jersey City 4, N.J.

Now there's a boy who listens. We said make 'em short and he sure did. In case your public is wondering whether or not you sprained your typewriter finger we'll tell them, Joe. We asked for them short.

NOTE TO MOSKOWITZ

by Bobby Gene Warner

Dear Editor: After reading the lead novel in the August issue of STARTLING, I have but one thing to say. And that is—well, with this lamp in my throat, what can I say? It was good. It was science fiction. True science fiction. The best of science—and that means above the level of Astounding—or what have you. And I defy anyone to say that it was not. It is the type of story I would like to read each and every time I pick up an issue of a science fiction magazine. I can see no reason why it should not see hard-cover printing in the near future. THE LOVERS was the sort of story which makes STARTLING startling. I am sure that I speak for all fandom when I say: MORE, PLEASE!

And that cover—can it be Earle K. Bergey? The old splotch and blotch Bergey of days gone by? If it is—then I gladly take back each and every nasty thought I've ever harbored about him for 101 these many years. (About six, I think.) That cover was GREAT! Oh for the original! (Well, I can want, can I not?) (You can not!—Ed.)

Well, it sure seems that 1952 is going to be SS's BIG year. If more stories like *The Lovers*, *Pastport to Pax*, etc., continue to appear between your hallowed pages, 1952 will be your BEST year. Of course, 1953 will be better. Then 1954 even better, and so on into infinity.

Oh, chuckle, chuckle. Do we get a sequel to MAJOR VENTURE AND THE MISSING SATELLITE? But I suppose that's up to Charles E. Fritch, huh?

The best letter in TEV was written by D. Y. Cummins. I suppose she was referring to psycho-analysis (or maybe autosuggestion?) when she said "... and by inward probing, discover and remove the cause of which pitters are the result." Thank you, Mr. Cummins, for a very intelligent letter.

Oh, Henry M. Cap Fut is done and dead of a too-deep inhalation of Stardust. So let him be, will you. And Grag's rusty; the android's long since decomposed; Simon Wright is making electric brains for John W. Campbell, Jr., and Joan C. is married to a Marian Murp, and now has five pseudo-kids, so she can't do much in the way of galactic gallivantin' these days. In short—the old Cap's gone (sob). So let Sam alone, huh? (There, now, Sam, if he hounds you again, I shall personally Thingamabob him—right across his posterior!)

In case this sees print—Hey, fen, I need certain issues of STARTLING and THRILLING WONDER from 1940 to present. They MUST be MINT. I'll pay 30¢ each for the ones I need. Maybe more if they're Minty Mint. Send me lists of what you have.

(Now, Sam, after all the nice things I said, ancha gonna print my plug? Huh? Please?)—P.O. Box 63, Beesway, Texas.

With all the plugs we've printed we should be able to retire to a stud farm in Kentucky. And none of your double meanings either. As to Cap Future, Moskowitz is in there slugging yet.

FROM JAPAN

by Tetsu Yano

Dear Sir: I beg your pardon that my English is not so correct and you will very much annoyed to read my letter. Why I write you is as to the Science Fiction.

I am 28 years old and have a wife and one baby and my profession is photographer and have a little photo-finishing shop. I learned English 8 years when I were student at high school and university—I studied law. I could not graduate university because I entered in Army last war. But my English is very poor!

I have one clever brother-in-law. He is a professor of Architecture. Many nights we used to have pleasant talk which concerned Universe, other planet and so on. You can imagine. In several field in fiction, I have much interest in scientific story especially concerned with other planet, rocket, etc.

In Japan there are many magazine that contain something like "literature" but we have not "scientific-fiction magazine." As to myopery, there is one named HOSEKI (Jewel)—then I have to read American magazine. After I had read through several numbers I thought in my mind that something unknown interesting field or career shall be opened. I cannot remember which is better to use—shall or will—with this fact that I am reading science fiction.

Of course I like camera but I like printed page better. I mean I like book. I don't know my future figure, but if possible I want to work in the field which have some concerning with science fiction.

Then I made up my mind that after now I will read S-F seriously and systematically. Why I used the word "systematically." Even when I read PLANET MENDER or something like such fiction if I did not know the solar system I can't understand the story precisely. But why Watson can fly so fast to Mercury from Mars? By what space ship? I can't imagine.

My scientific knowledge is so poor, and I want to get teacher or kindness guide who teach me that which book first and second—systematic reading for me.

If you may mention me the necessary book and publisher, I am very much pleased. Many times I hesitated that to whom can I write and ask for help. To Mr. Blish? No. Supposing he is very busy. To Mr. Editor of science magazine. He is some busy too. But I dare write you by my poor English, Mr. Mines.

Please show me my way to read and to understand science fiction, please. If I could get your reply, I am very much appreciated.

Good luck to you and your magazine.—567 Yashiro Uoshibaka, Higashisadaku, Kobe, Japan.

Fan who have been lusting for Japanese postmarks on their mail have a chance to meet a charming personality with an alert intelligence and do a good turn too by answering some of Mr. Yano's burning questions. I'm sure he'd be delighted to correspond with American fan, poor fellow. We have recommended a few books to him, also dropped the thought that if he just

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keeps reading at long enough he'll catch on. But in the meantime, why not write him yourselves?

THE BEST THINGS IN LIFE ARE FREE

by Patrick M. P. Kelly

Sam: Shame on you for the take-off of Capt. Future in the current issue of SS. I hope every C.P. fan will take you to task. As for your comment on my letter in TWS—there is no congradulation. Free thinking (?) is as much a bias as those of II Duce, Hitler and Stalin.—2601 S. Figueroa St., Los Angeles, 7, Cal.

How's that again?

ALL BURNED UP

by Eunice E. Shawer

Dear Mr. Mines: I am sick and tired of you calling that column of personal correspondence between you and a few picked friends a "fan column." I have written you six or seven letters, which, perhaps were not so witty or interesting to you as your friends' drivel, but which may have been of interest to some other reader of your magazine.

Although, I am sorry to say it, STARTLING STORIES remains my favorite Science Fiction Magazine.

I don't care if you read this letter or not, but I assure you I feel much better for having written it—612 Hamilton St., Houston 3, Texas.

We're spoiling you, Eunice, this is the second letter of yours we've used. Friends, did you say? Friends! Ha!

BACK TALK

by L. Sprague de Camp

Dear Sam: Herewith some comments on the recent letters by Messrs. Browne, Gross, and Miller on exotic words in stories, and your replies.

First a correction: Van Vogt once told me that he rhymed with "joked."

Second, an answer: About odd astronomical names, the Babylonians began the custom of naming planets after their gods (Naba, Ishtar, Nergal, etc.) because they thought they were their gods, which is how the pseudo-science of astrology started. Later the Greeks took over the custom, naming the visible planets after the corresponding gods in their own pantheon: Hermes, Aphrodite, Aries, etc. And finally the Romans did likewise, whence Mercurius, Venus, Mars, etc.

Then the Arabs named many stars, but being Muslims and lacking a multiplicity of gods, they named them after ordinary things, e.g. Deneb, "tail." And in still later times, after the invention of the telescope, astronomers named other celestial objects after other Graeco-Roman mythological figures, other astronomers, and so on.

Third, a question: Can anybody solve a problem that has long bothered writers of stories laid in an exotic setting: the remote past, the remote future, or another world? Namely, what to name

people and places.

Obviously Jones and Smith, Chicago and Berlin won't do. One can make up nonsense-syllables like Bu and Ga, but these are unconvincing because real languages aren't like that. There wouldn't be enough such syllables to go round. (Chinese, though nominally monosyllabic, uses many compounds of two or three syllables to avoid ambiguity.)

Or one can adopt names from Terran history and mythology, but it knocks a hole in my suspension-of-disbelief when I come across "Demeter" in the chronicles of Conan, for I know that this is modern Italian for the Classical Greek "Demetrios" and shouldn't turn up in Howard's imaginary prehistoric world. It also gives me pause when (as has twice happened in recent years) I come across "Rhiannon" as an extra-terrestrial name, knowing that Rhiannon was an ancient Welsh goddess.

Or one can do as I sometimes do: invent an exotic language of logical grammar and phonology, modelled after some Terran tongue, as Gozashandou is suggested by Persian. But then some readers balk at the resulting words even when they are quite pronounceable if you look at them.

The trouble seems to be the modern system of teaching children to read. This "sight-reading" treats words as units to be recognized by shape, as if they were Chinese ideograms, without bothering with the sound-significance of individual letters. The children learn to read faster earlier than they otherwise would, but never fully master the fantastic vagaries of English spelling, and when they meet a word of unfamiliar shape it throws them completely. Never having learned to look at a word, phonetically, they find it, as one of my critics once put it, "a pain in the neck" to do so.

Of course in "The Glory that Was" I had no choice; I had to call Perikles Xanthippou Perikles Xanthippous because that was the historical character's real name. Most of these Greek names have quite simple translations, but if I had referred to Perikles as Surrounded the son of Yellow Horse (which is what Perikles Xanthippou means) I fear I should have confused more readers than the other way.

Well, what's the answer? If the readers can't propound a final one, perhaps they can have some fun kicking the subject around. One could confine one's stories to homey tales of soda-jerkers named Henry Jones who accidentally mix up an elixir of life when filling an order for a banana split. Such stories are all right too, but if science-fiction ever comes to consist exclusively of them I fear I shall find it just too dull and have to go back to working for a living.—*Wallingford, Pa.*

Gad, not real work—! Anything but that. Though offhand we lean toward the theory that some of Sprague's stories represent some work, or a reasonable facsimile thereof.

Two letters from Craig Sutton—a tearful plea for trimmed edges, a rave for BIG PLANET, a nod for guest editorials, a gripe about the short stories, a sneer at Bradley and R. K. Freeman and this:

"...And being the stupidest fan today, I

still can't see so much as a remote connection between fruit bugs and me. I'll be twice damned if I look like a fruit bug . . . given, I'm ugly. But I am NOT a fruit bug. Somebody else recommended that the good doctor put the humans into bottles and study them. That I agree to. Maybe then we could get a good analogy."

As to whether you are a fruit bug or not—on that we cautiously reserve decision pending the arrival of a photograph for study purposes. And putting you into a bottle is a fascinating idea—don't tempt me. But as I have explained until my arm is weary, you don't have to be a fruit bug. The life force works for all living creatures. Doncha remember the Egyptians, Babylonians, Persians—all the races which built up mighty empires and then got tired?

STF-STARVED SCOTS

by Matt A. Elder

Dear Sam: Here speaketh a voice from out of Scottish fandom. From this forgotten corner of the world come my praises. Long have I searched in the realms of the Back Number, but I'll eat a haggis if I could find a letter from the Republic of Scotland.

I only have the first seven SS's for this year . . . (Ed. has here deleted a page of listings. Matt likes Leinster, Chandler, St Clair, Kutner, de Brackett, Raves about Crossen and Schomburg, sneers at the March SS cover and at Alex Victor.)

Would some nice American fan please correspond with me? And another request. Does any kind person feel like being charitable? We poor stf-starved Scots will be pleased to accept anything in even half-reasonable condition—please?

Well, Sam, if SS and TWS keep on coming as good or better I for one will have nothing to grouse about. My best wishes to you.

I am very sorry I could not write this in tartan ink but we may get around to that before my second half-yearly report. Till then I will live on my hopes to see this in the ranks of the honoured in SS.—*37 Moray Place, Glasgow, Scotland.*

Was about to offer to trade you some back copies of SS for a haggis, until I looked it up in Webster . . . urg. You can have them for free. Anybody who'll eat that deserves them.

PLUG

by J. T. Oliver

Dear Mr. Mines: Today I had the great pleasure of meeting one of your newer writers, a guy named Roger Dee. He is a very nice, friendly sort of fellow, about 37, really intelligent and a bit modest. He has a Pontiac, a couple of dogs and one charming and beautiful wife, who is equally friendly and easy to know. We were really pleased with them and regret they couldn't stay longer. Roger is now working on a second novel and several shorter items. He has stories scheduled for

several magazines other than yours as well as a couple of anthologies. I don't think it will be long before he's one of the Big Name writers. It couldn't happen to a nicer guy! He takes writing seriously. It isn't just something that he does for money; he likes it and wants to do the best possible job.

New SS is pretty good. The novel is interesting and the other items were pretty good. Cover was excellent.—315-27th St., Columbus, Go

Dee-lighted.

ON BELIEF AND SUCH

by Rev. C. M. Moorhead

Sir: At the risk of starting another "religious war" I would like to say a few things in answer to some remarks made by Mrs. Mary Corby in the September 1952 issue of STARTLING STORIES.

She said, "The two great enemies of birth-control are ignorance and religion." Why is it that many people use "religion" as the scape-goat for all the world's ills and woes? This is a great age for "passing the buck" and I find that the out-worn word "religion" comes in for more than its share.

I confess that I grow weary from the way the word is over-worked. Religion is a broad subject; I'd like for the lady to be more specific. To what religion is she alluding? There are 13 extant religions today and each has its following. Does the word, as she used it, refer to Christianity? If so, to which branch does she refer? Christianity is divided into 3 main branches: Roman Catholic, Greek Orthodoxy and Protestantism. Which of these three is opposed to birth-control? Which of these three discharged the doctors from the hospital for giving birth-control advice to their patients?

Again, she said, "In the better fed countries knowledge of birth-control has been disseminated in spite of the opposition of the church." Another broad general term. What is meant by the term "church?"

A person cannot judge all Christianity by one segment of it! I wonder if people realize that many, many churches of liberal protestantism not only teach but urge birth-control, and this not because it was forced upon them, but because it seemed the humanitarian thing to do. As a minister, I myself, have given such advice to many young couples who have come to me for pre-marital counselling.

Finally, while she does not state it in so many words, yet the implication is there, that "religion" is to blame for the abortions racket. I think that is carrying the thing a little too far. My observations have been, and I do not claim infallibility, that many of the women caught in the abortions racket are either too far to use contraceptives or are caught in the family-way out of wedlock! The chief reason why so many girls are caught in the family way out of wedlock is because their parents are too "damned" cowardly to tell them the facts of life, sufficiently early to avoid that pitfall. So don't blame the "church" for that.

I get sick and tired of the attitude that Christianity is the basis for all the world's ills. There are altogether too many people, who parrot-like, quote what someone else said without taking the trouble to see if the person quoted is correct.

Some wit once said, "We believe only what we want to believe," and after reading the fan letters in S.S. and T.W.S., I am convinced that he hit the nail squarely on the head!

And now I will crawl back into my web behind the organ.—Community Church, Kelleys Island, Ohio.

We have a small suspicion that Rev. Moorhead may have put his finger squarely on it when he says "we believe only what we want to believe." May turn out yet that belief is a matter of the ductless glands.

CLASSICS AND ULCERS

By Jan Gardner

Dear Sam. Just finished reading the Oct. ish of STARTLING STORIES. Cover was excellent. Kind of made me shiver even in all this summer heat. At first glance it would appear the new format for your front covers cause the illustration to shrink up too much but the compensation of no lettering will probably justify this format in the eyes of those readers who delight in tacking up exceptional covers on club house walls. This way all they gotta do is snip off the edges containing the mag title and story titles and zippo, an unmarred reproduction of space or BEAMS or whatever presents itself. Maybe you should print the mag with two identical front covers on the front: that way the more intense strata of fandom can whip out their three-dimensional-illusion photo viewers, pop in miniature reproductions of the cover and EGAD'S MAN! It's come alive! Etc., etc. Might even make money out of it! (Phew... how corny can I get? Anything for a job, in this day and age).

Now for the meat of your mag: the ETHER VIBRATES (Whoops, should have said the stories. Oh well; might as well be hanged for something good.) I was seriously considering becoming a sti editor as being the quickest and easiest way to get my own stories published until I read your heroic saga of editordom. Now I've changed my mind: I'll keep on grinding out my brilliant classics and let the editor develop ulcers reading 'em. As an author I stand a chance to survive. As an editor the longevity graph seems dangerously low. Besides, what are you guys gonna do for a living when we finally do land on Mars? At least the authors can become roving reporters. Yuk, yuk.

After reading your fascinating reader's column and noting the excellent plotting, characterization (and how!) and smash endings (but they're all so much alike: a street number and a state; let's have more originality) in each letter I was prepared to cast my eagle optics on the first page of the first story, namely ASYLUM EARTH. Now here, I say, is a story! It's even got sex in it! Held me spellbound to the last page. Need more be said? By the way, ... hint, hint, ... in case Elliott writes a sequel to this masterpiece, I gotta idea for a smash beginning. Brings the same characters right into the story with vim and vigor, all loose ends immediately tied up. (Gee, I didn't know you were so brilliant. Oh but I'm not, I'm just modest about it. Transcript 1,199 taken from thought records of eventful, historic making conversations between the conscious and sub conscious minds of earthling Jann Gardner, Esq., Etc., Etc.) Said idea available at reasonable terms. Nothing cheap about me;

nosree.

THE GUIDED MAN was a welcome diversion in sf humor. This type of stuff I can stand lots more of. Reams and reams of it, as long as it's as well written as deCamp's delightful opus. Real humor is sorrowfully lacking in sf and me being a serious kind of a guy, I need stuff like that to cheer me up. Thanks much.

THROWBACK was okay in a fair sort of way. That scoundrel Jon irked me considerably with his frigid attitude. All that fun he could have had . . . oh well, just a story. What am I saying! Maybe it was better than fair after all, to get me that interested.

NOTICE OF INTENT was an excellent short story. I enjoyed this one very much. Interesting, worthwhile motivation. The author writes from the heart it seems as well as from the brain and the finger tips.

GRAVESONG was tops in my opinion. This sort of story has a marvelous blend of realism and atmosphere in it; something that seems to come as a result of a good handling as well as a well balanced plot. I'd like to see a full length novel by Miller with a similar style. How about it?

DISPOSAL could have been disposed of by the same rings that made the story passable-fair. It missed being sparkling humor by a sizable hairbreadth.

Having taken the stories apart (thereby satisfying my rejection-slip-ego) let's start on the illos. Here let it be known to all and sundry that the following gilt edged comments are only one artist's opinion. (Yup, I'm an artist too; I say this in full realization that my genius is unfortunately not appreciated by this war-weary world, but some day . . . ah yes, some day! . . . my portraits will hang in the rogues gallery . . . oops, I mean in the art galleries. P.S. to Ed. You may delete these asinine parenthetical ramblings if you wish; I think they stink too, but it's a sure-fire way of seeing a letter in print. Oh no! NO! ANYTHING BUT THAT! NOT THE WASTE BASKET!!)

Finlay, as always, is super-superb. Any story endorsed by his drawings is qualification enough for me to plunge into it with avid interest. How about several illustrations through the pages of the lead novel? It has always seemed to me that this sparked the format up to such a degree that the reader's interest was drawn on and on as if his eyeballs were made of iron and the illos had some weird magnetic property about them, especially where a moderate sprinkling of lightly clad females are present.

On the whole your illustrations are clear-cut, presentable and further the story-interest. I don't know who did the illo on P. 109 but stuff like this and what Finlay turns out is very eye-catching: good pen and ink stuff with clear line technique is always in a class by itself.

The features? To tell the truth (what a shock) I don't read 'em unless the title sounds extra-good; ETHER VIBRATES is enough of a feature for my poor brain to absorb. Like I say it's the meat of the mag; then I go on to the stories for the psycho-therapy their entertainment-value gives me. —Afradels, Canterbury, N.H.

The question is whether you or I can stand more of THE GUIDED MAN kind of humor. I probably am a pushover for the farce type

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CIVIL defense officials everywhere face a real handicap in our American talent for putting things off. We read that there is danger of war—but not before 1953, or 1954, or 1956. We sigh and relax. We know in our hearts that the danger is real. But we are content to wait until it is at our

very doors before taking the first steps to protect ourselves.

Let's face it. So long as we need armed forces in a state of readiness, Main Street must be ready, too. We must get ready and stay ready for as long as the threat of aggression exists—five years, ten years, fifty years if need be.

The Kremlin never stops plotting to get what it wants. Some of us are still in the planning stage of the fight to keep what we hold most dear. The time to get busy is now. If an attack comes it can be met only by people who are trained and waiting, not by people who merely meant to be. What would you do if it happened tomorrow? You don't know? Then join your local civil defense organization today!

comedy in which the hero suffers and suffers the slings and arrows of outrageous fate, but as I have somewhere explained before, I cut my baby teeth on P. G. Wodehouse and haven't ever outgrown it. Let's face it—it is my unshakable, if wobbly belief, that real humor is one of the highest intellectual exercises. Why for, because in order to be a humorist, a man has to have an exceptionally well balanced mind, so that he can see the ludicrous and the ridiculous in any situation.

If you don't think that is a highly intellectual exercise try it. So why is Milton Berle funny did you say? Who says?

As to ulcers—does it begin with heartburn in the morning? Where's that bicarb? I can still taste my breakfast. Letter columns like this one in four magazines are undoubtedly taking years off my life, but the only thing that sustains me is the high call of giving these classic (urp!) fan letters to the world. May I be forgiven for that.

Space is all but used up again, kids—here's what we can squeeze in: Sylvia Kinder, 143 Wabash St., San Bernardino, Cal. is organizing a fan club, wants members. Francis H. P. Knight, 7 Goscode Place, Walsall, Staffs, England chats entertainingly about old-time stories. Gwen Cunningham is living in a trailer, adds her rave about THE LOVERS and suggests calling him Phillippe Jose Agricola.

Hilary F. Wiggin, 162 Maple St., Malden, 48, Mass. is impressed with THE LOVERS, points out that it deals with people, thus shares greatness with Bradbury—the best. Celia Block, Box 1031 Sioux City, Iowa, likes the letter column, defends scantily clad girls on the covers as understandably adding interest and wonders if she is the only stf fan in Sioux City. Look up Marian Cox, Celia. Pat Davis of Seven Springs, N.C. reports that she found THE LOVERS rather slimy and wonders if we threw it in just to start a fight. George Edwards, 5323 Mission Woods Terr., Kansas City 3, Kans., wants to start a stf club. Terry Carr, 134 Cambridge St., San Francisco, Cal., gripes about the lack of humor in this column and emotes:

STARTLING is a magazine

With covers beyond compare.

The layout's good as are the yarus... .

But something isn't there."

I miss the wit that Mervin showed,

And the column that he ran,

But don't mind me a bit SaMines

I'm just a Mervin fan.

Bobby Gene Warner, Box 63, Bessmay, Tex. wants back numbers of SS and TWS from

1939 to 1944, will pay 25¢ a head in good condition. John Donahue Jr. of 619 Drake Ave., Roselle, N.J., is only 11 years old and his parents won't let him read THE LOVERS because of the pictures. (Put it in the trunk for five years, John. Maybe SPACE STORIES would be better for you?) James F. Lynch wants dates of stories: VALLEY OF CREATION—July, 1948, THE DARK WORLD—Summer 1946, THE BLUE FLAMINGO—January 1948. Mike Wigodsky says BIG PLANET is Vance's best and wants to know if ASYLUM EARTH is KINDERGARTEN (yep, we explained that in an early issue.) Bob Hoskins, Lyons Falls, N.Y., liked BIG PLANET and Leinster's guest editorial, offers for sale Margulies & Friend's MY BEST SCIENCE FICTION STORIES at a discount.

Joseph L. Green of 823 Magnolia Ave., Panama City, Fla. applauds our—ahem—courage in printing so unique a story as THE LOVERS. Arthur Brandenwem of 306 West 100th St., New York, suggests we read COSMIC FORCES OF MU dealing with the theory that our sun revolves about a superior sun. Mildred Moore of 116 William St., Hightstown, N.J. reports there is a stf book club called "The Reader's Service Book Club" at 119 E. San Fernando St., San Jose, 21, Cal. and wants correspondents. Jim Lewis of 440 Morningside Dr., Miami Springs, Fla., has a rave for GRAVESONG wearis of idealistic heroes who sacrifice themselves to save an undeserving humanity. Richard Geis likes supermen heroes; Gregg Calkins liked our editorial in the September ish; Douglas O. Clark, of Pacific, Missouri wants fan to write their radio stations and ask for stf programs; Star Traveler Joe Semenovich says we think we got problems running a prozine, how about his problems running a fanzine?

Jim Rutherford, c/o The PHOENIX, 4222 E. Cambridge, Phoenix, Ariz., wants to meet some southwest and Mexican fans. Bob Feller of 6316 E. Fairfield, Los Angeles, 22, Cal. is only 13 years old, but read THE LOVERS with the feeling of having discovered something terrific; Rhoda Coulson, 1770 Columbia Rd. N.W., Washington, D.C., hated Major Venture to pieces; Delray Green, R.R. #4, Munie, Indiana, wants Cap Future, a sequel to THE GUIDED MAN, more Manning Draco and Magnus Ridolph. Peter Frailey, 5055 Bradley Boulevard #4, Bethesda, Md., liked ASYLUM EARTH AND THE GUIDED MAN . . . and we give up. . . . See you in the next issue.
—The Editor

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**REVIEW OF THE CURRENT
SCIENCE
FICTION
FAN PUBLICATIONS**

RECEIVED a card from Barclay de Lify Johnson, of 878 Oak Street, Winnetka, Illinois . . . as follows:

Dear Jerry:

Forgot to mention it, but (for your review) the cost of my stf club directory is a dime.

Okay, Bark, we'll pass the word along . . . but what stf club directory? First we've heard of it.

Next, a letter from Donald Susan, co-editor of *THE PENDULUM*, who wants to round up some foreign correspondents for the 'zine . . .



fen are invited to send him stf news-items from Australia, New Zealand, Canada, France, Germany and Mexico. Address: 706 Grant Street, McKeesport, Pennsylvania. Also, a fan-club has flowered in that vicinity (B. de L. J., please note), and members are urgently desired. Local chapters will be formed in Pittsburgh, McKeesport, thereabouts. All interested parties please call Susan—Pittsburgh: LEhigh 1-0318—or write him at above address.

Next, an item which, though not a fanzine in the strictest sense, gets a mention: APPROACH TO INFINITY, a booklet of stf art by Morris Scott Dollens. Elegantly printed. Contains about fifteen typical (i. e. magnifique) Dollens black-and-whites. Price: 30¢, ppd. . . . from Roy A. Squires, 1745 Kenneth Road, Glendale 1, California.

FANTASTIC WORLDS, 1942 Telegraph Avenue, Stockton, California. Editor: Edward W. Ludwig.

Published quarterly. 25¢ per copy; \$1.00 per year.

The long-awaited first issue . . . and not bad, not bad at all. If it had come in cold, minus advance hoopla, we'd probably have screamed with amazed delight. As it is, FW ranks toward the top in format and production; only slightly under that in content (a personal opinion, mind, based on our fervid indifference to fantasy, toward which FW appears to lean). Keep an eye on it, though . . . in fact, why not subscribe?

SCIENCE FANTASY BULLETIN, 12701 Shaker Boulevard, Apt. 616, Cleveland 20, Ohio. Editor: Harlan Ellison. Published monthly. 15¢ per copy; \$1.50 per year.

Big news this ish is contained in Harlan's editorial, DECLARATION OF INDEPENDENCE, which relates how it came to pass that the BULLETIN and its editor are no longer associated with the CLEVELAND SCIENCE FICTION SOCIETY.

Anyone for murder?

Dave Kyle's article IN DEFENSE OF MY FANHOOD takes top honors. Also many stories, poems, articles, poems, features. A comer.

THE BOB SHAW APPRECIATION MAGAZINE, 170 Upper N'Aeds Road, Belfast, North Ireland. Perpetrated by Walter Willis.

We raised all three eyebrows at this one, and thought, in a stunned tone of thought, "Now, what in the hell?"

Upon perusal, however, the pages proved to contain entertaining sequences of words, which led one on and on, and left one with the conviction that Shaw, whoever he is, richly deserves either to be appreciated or to appreciate his biographers.

THE DIRECTORY OF ANGLO-FANDOM, No. 1 Stratford Square, off Shakespeare Street, Nottingham, England. Editor: John Gunn, Esq. (Librarian, British Fantasy Library).

Title is self-explanatory . . . the names and addresses of several hundred English fans, plus a rundown on the contents of the British Fantasy Library.

RENAISSANCE, 40-14 10th Street, Long Island City 1, New York. Editor: Joseph Semenovich. Published irregularly. 10¢ per copy; three for 25¢.

The superiority of this, Semenovich's fourth fanzine effort, over his monstrous first issue of some months ago, is eloquent proof of something or other . . . of the great gouts of blood, sweat and tears that must have sprung from the Semenovich personage in the interim, we imagine. Anyhow, not bad; and constantly on the up-grade. Stories, articles, features . . . and an amusing touch on the very last page, to which, in his editorial on the page preceding, Semenovich refers the reader with the words: "And now to my capable co-editor, Warren [Freiberg]," thus setting the scene for Mr. Freiberg's editorial.

On the last page, however, in half-inch letters, is the following intelligence:

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ATTENTION!

This zine
IS
RUN
BY
ONLY
ONE PERSON
AND THAT BEING
JOE SEMENOVICH

We have a vision of the editorial falling-out that must have occurred: an unkind word, perhaps, or a mild disagreement over the merits of an item submitted for publication; then suddenly harsh words, uttered in loud sharp tones; the clenched fist, the drawn blade; the stormy exit of M. Freiberg; the cry of "Stop the presses!" and the rumble of an A. B. Dick slowing to a halt; the glaring eyes and bourse sounds of breathing as the stencil bearing Mr. Freiberg's editorial was ripped bodily from the cylinder and torn to shreds, and the aforementioned magnificent declaration substituted. . .

H'm . . . just remembered. Freiberg lives in Chicago.

Hoo ha. Note: RENAISSANCE is hard-up for material . . . stories, articles, poetry, art, even letters.

OOPSLA!, 761 Oakley Street, Salt Lake City 16, Utah. Editor: Gregg Calkins. Published every sixth Tuesday. 10¢ per copy; \$1.00 per year.

Another one that deserves the appellation of "steady coffer," Contents and production are of excellent fan-quality.

Despite the fact that we jumped all over Ken Beale several months ago, and would do so again under like circumstances, we offer our opinion that his column, THE JAUNDICED EYE, is about the most enjoyable thing in the zine. We venture further, and say that it is one of the most professionally written columns in the fan field.

STRAIGHT UP, 37 Willows Avenue, Tremorfa, Cardiff, Glam., South Wales, Great Britain. Editor: Fred Robinson.

Crammed, as always, with a variety of readable items . . . news fan and pro, advertisements, a report on the LosConCon, fanzine reviews. And a story. Only eighteen lines long, thank God. Mimeographing considerably improved.

GHUVNA, 148 Landon Street, Buffalo 8, New York. Editor: Joe Fillinger, Jr. Published irregularly. 10¢ per copy.

A big one . . . seventy pages. Mostly fiction, some of which is quite tolerable. Also poems, departments, articles—most impressive among the latter being Al Leverentz' AN ARTICLE ON THE SALEM AFFAIR.

Charlie Monberger (co-editor of GHUVNA) is responsible for most of the artwork this ish, and concerning him we will make two comments: If he isn't employing a swipe-file, and tracing line for line from the work of more able illustrators, he's one of the best fan-artists around; if he is proceeding in the above manner—which is not so godawful as to be beneath certain pro-artists we could name—then he still has a deft touch and a pack of talent,

and will probably hit the promags before long.

VARIANT WORLDS, 1234 Utica, Brooklyn 3, New York. Published (theoretically) every six weeks. 15¢ per copy.

Sheldon Deretchin just walked out of our office. He was walking backwards, facing our desk as he dwindled. His arms were outstretched, fingers clawed, in a gesture of agonized solicitation. His eyes stied with us.

He said, as he vanished from our sight, "Please, give VARIANT WORLDS a good review, huh?"

So . . . live a little we'll do it.

VARIANT WORLDS is neatly reproduced. It contains stories, various editorial ramblings, departments, a poem, and an upside-down page.

We had ourselves a hell of a laugh over that page!

SCIENCE FICTION NEWS LETTER, P. O. Box 702, Bloomington, Illinois. Editor: Bob Tucker. Published irregularly.

We don't propose to dwell on this one, having said again and again that it is top-rate and that its imminent demise is a damn shame.

STAR LANES, 1958 W. Hazelhurst Street, Ferndale 20, Michigan. Editors: Orma McCormick and Nan Gerdling. 20¢ per copy; six copies for \$1.00.

Poetry, ranging from fair to rather good. Particularly liked the Lorraine.

It's Friday afternoon . . . 4:56 . . . excuse us if we cut this short. See you next month.

—JEROME BIXBY

P. S. Three weeks after the above writing; Sept. 2, 5:40 P. M.

Just got this thing back from the press, and there are three wide-eyed little inches to fill. We could simply reach for a fanzine and give it the treatment; but we're not quite up to that task, having just returned to our desk after four wonderful, dazzling, hectic days in . . . guess where. You're so right. And we couldn't focus to read a Goodyear blimp, much less a fanzine. Just a few words on how we feel about the Convention, then:

We had the time of our life. We met the most wonderful bunch of people we've ever come across under one roof. We attended one of the most terrific shindigs we ever attended. We spent four days in a world apart . . . a vastly stimulating little world, and, somehow, as encouraging a one, populated with exciting personalities the likes of which are scarce as hen's chompers in this wide outside world we have returned to. . . .

It was a time we shall never forget. We're looking forward to the next one, and the next, and to seeing all you swell people again. We hope each and every one of you had a helluva time too.

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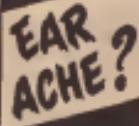


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